# XII. A Revision of the American Notodontidr. By William Schaus, F.Z.S. 

[Read June 5th, 1901.]

## Plates XI and XII.

In the present revision of American Notodontidx I have omitted the Melalophidx as separated by Mr. Dyar, and hope on some future occasion to give this sub-group my attention. Besides the types in the British Museum and at Oxford, I have been able to examine the types figured by Felder, those described by Mr. Dognin, and very nearly all described by Mr. Herbert Druce. I have not referred to Heterocampa mariva, Dogn., H. nea, Druce, and H. volana, Druce, which are Noctuidæ, and likewise a number of species included in the Biologia Centrali-Americana, and Kirby's catalogue under the Notodontidæ, as they belong to other families. The types of a number of Walker's species described from the Fry collection are lost, and so far as I am able to identify them from the description, they belong to other groups. Pcroma anomala, Sureta tripars, Sanega orcus and Sidana bifascies may all refer to species of Hemiccras. Burmeister in his Atlas, Pl. xxii. fig. 2, figures the larva of an Anurocampa camelinoidcs $=$ A. canovaria, Walk., and fig. 3, A. vomax, which he believes to be $A$. melanostigma, Walk. Walker described a Naprepa camelincrdes, and the figure may refer to this species, but $A$. canovaria, Walk., is evidently a species of Hydrias, and A. melanostigma a species of Titya, so fig. 3 no doubt refers to a new species, or it may eventually prove to be Naprepa elongata, Schs. I have not always given the synonymy of the North American species, as they have been so admirably worked out by Professor Packard. At Rennes I have examined Guenée's types of the genus Hemiceras, and have carefully compared specimens of all the species in my collection. I have not seen Möschler's types, but his descriptions are all that could be desired.

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Key to the Genera.
$A$. Vein 5 on secondaries present.
a. Inner margin of primaries without tuft of scales. $a^{1}$. Areole present.
$a^{2}$. Vein 5 on primaries from upper angle of cell.
$a^{3}$. Veins $8-10$ stalked
Calledema.
$b^{3}$. Veins 7-8 stalked.
$a^{4}$. Apex of primaries truncated . . . . . Drastoma.
$b^{4}$. Apex of primaries not truncated . . . Pronerice.
$c^{3}$. Veins 7-8 not stalked . . . . . . . : Tagela.
$b^{2}$. Vein 5 on primaries from below upper angle of cell, or from middle of discocellular.
$a^{3}$. Veins 6 and 7 from upper angle of cell . . Strophocerus.
$b^{3}$. Vein 6 only from upper angle of cell, or from areole near cell.
$a^{4}$. Veins 7-10 stalked.
$a^{5}$. Veins 3 and 4 on secondaries stalked . Antiora.
$b^{5}$. Veins 3 and 4 on secondaries from a point Anurocampa.
$b^{4}$. Veins 8-10 stalked
$a^{5}$. Outer margin of primaries crenulate . Nadata.
$b^{5}$. Outer margin of primaries not crenulate. $a^{6}$. Veins 6 and 7 on secondaries from a point

Cargida.
$l^{6}$. Veins 6 and 7 on secondaries stalked. $u^{7}$. Palpi with third joint as long as second

Minara. $b^{7}$. Palpi with third joint very short . Nerice.
$c^{4}$. Veins 7-8 stalked.
$u^{5}$. Outer margin of primaries oblique. $a^{6}$. Anal tuft hairy

Nystalea. $b^{6}$. Anal tuft distinctly bifurcating . . Pentobesa.
$b^{5}$. Outer margin hardly oblique. $a^{6}$. Vein 8 on secondaries diverging from 7 at middle of cell

Heorta.
$b^{6}$. Vein 8 on secondaries diverging from 7 at end of cell. $a^{7}$. Veins 3 and 4 on secondaries apart Theroa. $b^{7}$. Veins 3 and 4 on secondaries from
a point
Euhyparpax.
$d^{4}$. Veins 7-8 not stalked.
$u^{5}$. Antennæ fasciculate.
$a^{6}$. Primaries crenulate. $a^{7}$. Palpi with third joint long.
$a^{2}$. Veins $6-7$ on secondaries stalked Bardaxima.

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$b^{8}$. Veins $6-7$ on secondaries not stalked ..... Phedosia.

```\(b^{7}\). Palpi with third joint short.
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$a^{8}$. No frontal tuft.
$a^{9}$. Outer margin of primaries not angled Elymiotis.
$b^{9}$. Outer margin of primaries angled. Ctianopha.
$b^{8}$. A high frontal tuft Proelymiotis.
$b^{6}$. Primaries not crenulate.
$a^{7}$. Palpi with third joint short.
$a^{8}$. A long tuft of hairs at base of

```antennæLysanc.
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$b^{8}$. A raised tuft on head ..... Pseudantiora.
$c^{8}$. Head without raised tuft.
$a^{9}$. Veins $3-4$ on secondariesstalked Cottobara.
$b^{9}$. Veins $3-4$ on secondaries not

```stalked.
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$a^{10}$. Abdomen with fan shape

```anal tuft . . . . . . Marthula.
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$b^{10}$. Abdomen without fan shape

```anal tuft.
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$a^{11}$. Fore legs smooth . . . Antiopha.
$b^{11}$. Fore legs hairy . Eragisa.
$c^{10}$. Abdomen with tuft of

```spatulate scales . . . . Crinodes.\(b^{7}\). Palpi with third joint long.\(a^{8}\). Wings broadPoresta.
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$b^{8}$. Wings narrow.
$a^{9}$. Head with raised tuft Lepasta.
$b^{9}$. Head without raised tuft.
$a^{10}$. Apex of primaries rounded ..... Tachuda.
$b^{10}$. Apex of primaries acute
somewhat falcate Contrebia.
$b^{5}$. Antennæ pectinated to tips.
$a^{6}$. Veins $3-4$ on secondaries apart Hyparpax.
$b^{6}$. Veins $3-4$ on secondaries from a

```pointKalkoma.
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$c^{5}$. Antennæ pectinated, but not to tips.

```\(a^{6}\). Head with a raised tuft.\(a^{7}\). Palpi with 3rd joint long . . . Didugua.\(b^{\top}\). Palpi with 3rd joint short . . . Dasylophia.
\(b^{6}\). Head without a raised tuft.\(a^{7}\). Veins \(7-8\) on primaries short.
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$a^{8}$. Vein 8 on secondaries diverging from 7 at end of cell . ..... Farigia.
$b^{8}$. Vein 8 on secondaries diverging from 7 before end of cell Pesudodryas.
$b^{7}$. Veins $7-8$ on primaries long.$a^{8}$. Vein 8 on secondaries close to 7 toend of cellEustema.
$b^{8}$. Vein 8 on secondaries divergingfrom 7 at middle of cell.
$a^{9}$. Veins 3 and 4 on secondaries apart ..... Tecmessa.
$b^{3}$. Veins 3 and 4 on secondaries from a point Psorocampa.
$c^{3}$. Vein 6 from end or near end of areole.
$a^{4}$. Veins 7-10 stalked.
$a^{5}$. Palpi with 3rd joint long Hippia.
$b^{5}$. Palpi with 3rd joint short .$b^{4}$. Veins 7-8 stalked.
$a^{5}$. Veins 3 and 4 on secondaries closetogether.
$a^{6}$. Areole long Arhacia.
$b^{6}$. Areole short.
$a^{7}$. Antennæ pectinated to tips Cerura.$b^{7}$. Antennæ pectinated but not to tips Betola.
$b^{5}$. Veins 3 and 4 on secondaries apart.$a^{6}$. Wings long and narrow . . . . . Lirimiris.$b^{6}$. Wings short and broadGopha.
$c^{4}$. Veins 7 and 8 not stalked.
$a^{5}$. Wings long and narrow Naduna.$b^{5}$. Wings short and broadPauluma.
$d^{3}$. Vein 6 from about centre of areole or atbase of areole when originating beyond cell.
$a^{4}$. Veins $8-10$ stalked Drugera.$b^{4}$. Veins 7-8 stalkedHardingia.
$c^{4}$. Veins 7 and 8 not stalked.
$a^{5}$. Antennæ pectinated to tips.
$a^{6}$. Areole short ..... Encerura.
$b^{6}$. Areole long ..... Salluea.
$b^{5}$. Autennæ pectinated but not to tips.
$a^{6}$. Fore legs with broad curved tufts ..... Skaphita.
$b^{6}$. Fore legs hairy.
$a^{7}$. Vein 8 on secondaries close to 7 to
end or near end of cell.
$x^{8}$. Head tufted.
$u^{9}$. Wings narrow, outer margin oblique Dicentric.$b^{9}$. Wings broader, outer marginmore rounded . . . . . Schivura.
$b^{8}$. Head hairy, no tuft.
$\omega^{9}$. Wings short and lroad . Litodonta.$b^{9}$. Wings long and narrow.
$a^{10}$. Areole originating beyond cell Psilacoron.
$b^{10}$. Areole originating before end of cell.
$a^{11}$. Vein 5 from middle of discocellular Misogada.
$b^{11}$. Vein 5 from near upper angle of cell Notoplusia.
$b^{7}$. Vein 8 on secondaries divergingfrom 7 at middle of cell.
$a^{8}$. Apex of secondaries obtuse Dognina.
$b^{8}$. Apex of secondaries rounded.
$u^{9}$. Costal margin of secondariesbelow not very hairy.
$a^{10}$. Apex of primaries very
acute . . . . . . . Ichthyosoma.
$b^{10}$. Apex of primaries not very acute Heterocampa.
$b^{9}$. Costal margin of secondaries below with long hairs and thick tufts Malocampa.
$c^{5}$. Antennæ fasciculate.
$a^{6}$. Fascicles long on basal half . ..... Magava.
$b^{6}$. Fascicles short on basal half.
$a^{7}$. Vein 8 close to 7 to end of cell.
$a^{8}$. Outer margin of primariesoblique.
$a^{9}$. Outer margin crenulate.
$a^{10}$. Palpi with 3rd joint short . Rhuda.
$b^{10}$. Palpi with 3rd joint long ..... Gisara.
$b^{0}$. Outer margin not crenulate.$a^{10}$. Veins 3 and 4 on secondariesapartBoriza.$b^{10}$. Veins 3 and 4 on secondariesfrom a point.$a^{11}$. Costal margin of second-aries straight at base.

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\begin{aligned}
& a^{12} . \text { Apex acute . . . Blera. } \\
& b^{12} . \text { Apex rounded . . . Chadisia. } \\
& b^{11} . \text { Costal margin of second- } \\
& \text { aries convex on basal } \\
& \text { half. } \\
& a^{12} . \text { Abdomen with long } \\
& \text { anal tuft . . . . Rincodes. } \\
& b^{12} \text { Abdomen without long } \\
& \text { anal tuft . . . . Talmenia. }
\end{aligned}
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$b^{8}$. Onter margin of primaries rounded.
$a^{9}$. Outer margin crenulate . . Ophitis.
$b^{9}$. Outer margin not crenulate.
$a^{10}$. Legs and palpi very hairy . Meragisa.
$b^{10}$. Legs and palpi not very
hairy
Phastia.
$b^{7}$. Vein 8 diverging from 7 at middle
of cell.
$a^{3}$. Outer margin of primaries angled.
$a^{9}$. Outer margin concave below apex

Euxoga.
$b^{9}$. Outer margin concave below
vein 6 . . . . . . . . Gocuxis.
$b^{8}$. Outer margin of primaries not angled.
$a^{9}$. Inner angle of primaries much rounded

Maschane.
$b^{9}$. Inner angle of primaries not
rounded . . . . . . . Rifargia.
$b^{1}$. Areole absent.
$a^{2}$. Veins $6-10$, or $7-10$ stalked.
$a^{3}$. Vein 10 from beyond 7.
$a^{4}$. Veins 3 and 4 on secondaries close together.
$a^{5}$. Vein 8 free . . . . . . . . . .
$b^{5}$. Vein 8 connected with 7 at middle of
cell by a bar . . . . . . . . Lobeza.
$b^{4}$. Veins 3 and 4 on secondaries apart.
$a^{5}$. Palpi long
Lusura.
$b^{5}$. Palpi small . . . . . . . . . . Gluphisic.
$b^{3}$. Vein 10 from before 7.
$a^{4}$. Vein 6 on primaries at some distance from cell.
$a^{5}$. Veins 3 and 4 on secondaries apart . . Nagidusa.

$b^{5}$. Veins 3 and 4 on secondaries from a
point.
$a^{6}$. Antemnæ pectinated to tips . . . . Ellida. $b^{6}$. Antenna not pectinated to tips . . Macrurocampa.
$b^{4}$. Vein 6 on primaries at or close to angle of cell.
$w^{5}$. Antennæ pectinated to tips.
$a^{6}$. Veins 6-7 on secondaries on long stalk
Hurpyia.
$b^{6}$. Veins 6-7 on secondarieson shortstalk Notela.
$b^{5}$. Antennæ not pectinated to tips.
$a^{6}$. Long tufts of hairs at base of antennæ Euhurpyiu.
$b^{6}$. No tufts of hairs at base of antennre
$b^{2}$. Veins 6-9 stalked
Eunotela.
Eunystalea.
$b$. Inner margin of primaries with tuft of scales.
$a^{1}$. Primaries with areole.
$a^{2}$. Vein 5 from upper angle of cell.
$a^{3}$. Inner margin excised and deeply lobed.
$a^{4}$. Outer margin of primaries angled . . . Pontala.
$b^{4}$. Outer margin of primaries rounded . . Apela.
$b^{3}$. Inner margin of primaries rounded . . . Dylomia.
$b^{2}$. Vein 5 from below angle of ce!l.
$a^{3}$. Outer margin crenulate.
$a^{4}$. Veins 7-8 stalked
Naprepa.
$b^{4}$. Veins $8-10$ stalked.
$\omega^{5}$. Vein 8 close to 7 to near end of cell . Lophopteryx.
$b^{5}$. Vein 8 diverging at middle of cell . . Herbertina.
$c^{4}$. Veins 8-10 not stalked . . . . . . Odontosia.
$b^{3}$. Outer margin not crenulate . . . . . . Hyperæschra.
$b^{1}$. Areole absent.
$a^{2}$. Veins 6-10 stalked.
$a^{3}$. Antennæ shortly pectinated . . . . . . Notodonta.
$b^{3}$. Antennae simple . . . . . . . . . . Lophodonta.
$b^{2}$. Veins 7-10 stalked
Pheosic.
b. Vein 5 on secondaries absent.
a. Areole present.
$a^{1}$. Antennæ pectinated to tips . . . . . . . . Goucampa.
$b^{1}$. Antennæ not pectinated to tips.
$\iota^{2}$. Vein 8 diverging from 7 at middle of cell . . Kurtia.
$b^{2}$. Vein 8 diverging at base of cell . . . . . . Anita
b. Areole absent.
$a^{1}$. Veins 3 and 4 on secondaries apart . . . . . Colux.
$b^{1}$. Veins 3 and 4 on secondaries from a point.
$a^{2}$. Antennæ of ot pectinated on basal half . . Hemicerus.
$b^{2}$. Antennæ not pectinated.

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\begin{aligned}
& a^{3} . \text { Antennæ nodose at base . . . . . Hapigia. } \\
& b^{3} . \text { Antennæ not nodose at base. } \\
& a^{4} \text {. Palpi with 3rd joint short . . . Chliara. } \\
& b^{4} \text {. Palpi with 3rd joint long. . . . Antæa. } \\
& c^{2} \text {. Antennæ pectinated to tips. } \\
& a^{3} \text {. Inner margin of primaries excised . . Psendluapigia. } \\
& b^{3} \text {. Inner margin of primaries straight . Canodia. }
\end{aligned}
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## Calledema.

Calledema, Butl., Trans. Ent. Soc. Lond., p. 65 (1878).
Antennæ fasciculate. Palpi porrect, long, especially the second joint. Primaries : apex acute, slightly falcate; outer margin much rounded to vein 4 , then oblique to inner margin ; vein 5 from upper angle of cell; veins $8-10$ stalked. Secondaries: veins 3 and 4 from a point ; 6 and 7 on short stalk.

Type. C. marmorea, Butl.
Marmorea, Butl., l. c. (1878).
Sodalis, Butl., l. c., p. 66, t. 3, f. 7 (1878).
Plusia, Feld. (Nystalea), Reise Nov., t. xcvii, f. 7 (1874).
Plusioides, Feld. (Nystalea), l. c., f. 4 (1874).
Jocasta, Schs., sp. nov.

## Calledema jocasta, sp. nov.

Primaries olivaceous-grey, with transverse wavy white strix ; an indistinct, geminate, basal reddish line ; a dark line from the costa at a third from the base, through the cell and between veins 4 and 5 to the outer margin ; this line is reddish-brown on costa, otherwise black; a reddish-brown spot below the median vein at vein 2 ; a large quadrate, reddish-brown spot on costa at two-thirds from the base. Secondaries brownish-grey.

Expanse $41 \mathrm{~m} . \mathrm{m}$.

## Hab. Rio Janeiro.

## Drastoma, gen. nov.

Female. Antennæ serrate. Palpi short. Primaries slightly convex at base of costa ; apex truncated ; outer margin angled between veins 5 and 6, then rounded to inner margin; vein 5 from upper angle of cell; 6 from near end of areole ; veins 7 and 8 stalked ; 10
from end of areole. Secondaries: veins 3 and 4 from a point ; 6 and 7 on short stalk.

Type. D. dardania, Druce.
Dardania, Druce (Tifama ?), Ann. and Mag. Nat. Hist. (6) xv, p. 49 (1895). Biol. Centr.-Amer. Lep. Het., t. xci, f. 17.

Pronerice, gen. nov.
Palpi extending well beyond head ; first and second joints long ; third joint shorter. Primaries long and broad ; costa slightly convex ; outer margin rounded; inner margin straight; vein 5 from upper angle of cell ; 6 and 10 from end of areole ; 7 and 8 on long stalk; areole long and narrow. Secondaries long and broad; costa convex ; veins 3 and 4 from lower angle, 6 and 7 from upper angle of cell.

Type. P. disjuncta, Dognin.
Disjuncta, Dogn. (Nerice), Le Naturaliste, p. 85 (1892);
Lep. de Loja, p. 90, t. 9, f. 8.

## Tagela, gen. nov.

Antennæ fasciculate. Palpi upturned; second joint long; third joint one-third as long as second. Legs smooth. Primaries long and broad ; the costa nearly straight ; the outer margin slightly rounded ; veins 3 and 4 well apart ; 5 from upper angle of cell ; 6 from near end of areole ; 7 and 8 from a point; 10 from before end of areole. Secondaries: costal margin straight; outer margin and anal angle rounded; veins 3 and 4 from a point ; 6 and 7 on short stalk; 8 diverging from 7 at one-third of the length of the cell from the base.

Type. T. dentata, Schs.
Dcntata, Schs. (Symmerista), P. Z. S., 1892, p. 335, T. xi, f. 1.

## Strophocerus.

Strophocerus, Möschl., Verh. Zool.-bot. Ges., xxxii, p. 344 (1883).

Female antennæ fasciculate ; a long tuft of hairs at base of antennæ. Palpi long ; second joint curved; third joint not half so long as second. Legs thin and long. Primaries broad : apex acute, subfalcate ; outer margin rounded ; inner angle oblique; vein 5 from above middle of discocellular ; 6 and 7 from upper angle of cell ; 8 from end of areole;

9 absent ; 10 stalked with 8 . Secondaries : veins 3 and 4, also 6 and 7 from a point.

Type. S. flocciferus, Möschl.
F'locciferus, Möschl., l. c., p. 345 (1883), t. 18, f. 35.
I am unacquainted with this species, and am inclined to doubt its belonging to the Notodontidæ.

## Antiora.

Antiora, Walk., Cat. Lep. Het., B. M. vii, p. 1769 (1856).
Antennæ pectinated. Primaries: veins 3 and 4 from a point; 5 from centre of discocellular; 6 from upper angle of cell ; 7-10 stalked from end of areole. Secondaries: veins 3 and 4, also 6 and 7 stalked; 5 from near upper angle of cell.

Type. A. subfulva, Walk.
Subfulva, Walk., l. c. $(1856)=$ Drymonia ochromixta, H. S. Ausser.-Europ. Schmett., i, f. 495 (1856).

## Anurocampa.

Anurocampa, H. S., Ausser.-Europ. Schmett., i, p. 11 (1854).

Antennæ pectinated to tips. Palpi hairy, conical, hardly extending beyond frons. Primaries : vein 5 from just above middle of discocellular ; 6 from upper angle of cell ; 7-10 stalked; areole usually short. Secondaries : veins 3 and 4 from a point; 6 and 7 on short stalk.
Type. A. mingens, H. S.
Mingens, H. S., l. c., ff. 83, 84. Larva figured by Burmeister. Lep. Rep. Arg. Atlas, Pl. xxii, f. 1.

## Nadata.

Nadata, Walk., Cat. Lep. Het., B. M. v, p. 1062 (1855).
Antennæ pectinated to tips. Palpi short. Thorax with a high crest. Primaries: outer margin crenulate; vein 5 from centre of discocellular ; 6 from areole near upper angle of cell; 8 and 10 stalked. Secondaries: veins 3 and 4 from a point; 6 and 7 stalked.

Type of genus. N. gibbosa, Sm. and Abb.
Gibbosa, Sm. and Abb. (Phalæna), Lep. Georg., 11, t. 82 (1797).

Cargida, gen. nov.
Antennæ pectinated in male, serrate in female. Palpi porrect, hairy; third joint short. Primaries : vein 5 from middle of discocellular ; 6 from upper angle of cell ; 7 from end of areole ; 8-10 stalked. Secondaries: veins 3 and 4 apart; 6 and 7 from a point.

Type. Cargida pyrrha, Druce.
Pyrrha, Druce (Heterocampa ?), Biol. Centr.-Amer. Het., p. 459, t. xci, ff. 4, 5 (1898).

## Minara.

Minara, Walk., Cat Lep. Het., B. M. vii, p. 1711 (1856).
Antennæ pectinated to tips in male, simple in female. Palpi hairy, porrect, extending just beyond frons ; third joint half as long as second. Primaries broad ; vein 5 from centre of discocellular ; 6 from upper angle of cell; areole long ; 8 and 10 on short stalk. Secondaries : veins 3 and 4 apart; 6 and 7 stalked.

Type. M. histrionica, H. S.
Histrionica, H. S. (Notodonta), Ausser.-Europ. Schmett., i, f. 382 (1855) = Pardalina, Walk. (Minara), l. c., p. 1712 (1856).

## Nerice.

Nerice, Walk., Cat. Lep. Het., B. M. v, p. 1076 (1855).
Antennæ pectinated to tips. Palpi: third joint very short. Primaries: vein 5 from centre of discocellular ; 6 from areole, usually near upper angle; areole long; 8 and 10 stalked. Secondaries : veins 3 and 4 apart; 6 and 7 stalked.

Type. N. Bidentata, Walk.
Bidentata, Walk., l. c., p. 1076 (18555).

## Nystalea.

Nystalea, Guen., Spec. Gén. Lep. Noct., ii, p. 122 (1852). Cyrrhesta, Walk., Cat. Lep. Het., B. M. xi, p. 633 (1857).

Antennæ fasciculate. Palpi extending a little beyond frons; second joint very hairy, smooth ; third joint very snall. Head with raised tufts. Wings long and narrow. Primaries: the outer margin slightly rounded, oblique, somewhat crenulate; vein 5 from above middle of discocellular; 6 from areole near cell, usually;
areole long, narrow, originating from before end of cell ; 7 and 8 more or less stalked. Secondaries: veins 3 and 4 from a point; 6 and 7 usually stalked; 8 close to 7 to near end of cell.

Type. N. ebalea, Cr.
Ebalea, Cr. (Noctua) Pap. Exot., iv, t. 310, C. (1781) = Conchyfera, Guen. (Nystalea), l. c., p. 122, t. 9, f. 2 (1852).

Nyseus, Cr. (Noctua) Pap. Exot., i, t. 75, E. (1775) = Nyseus (Cyrrhesta), Walk., l. c., p. $633=$ Guttiplenu, Walk. (Nystalea), l. c., xi, p. 635 (1857).
Superciliosa, Guen., l. c., p. 123 (1852).
Linciplena, Walk., l. c., xi, p. 635 (1857) $=$ Cucullir, Feld. Reise, Nov., t. xcvii, f. 6 (1874).
Inchoans, Walk., l. c., xi, p. 636 (1857).
Idonea, Walk., l. c., xv, p. 1743 (1858).
Virgula, Feld., l. c., xcviii, f. 3 (1874).
Squamosa, Butl., Trans. Ent. Soc. Lond., 1879, p. 26.
Nigritorquata, Dogn., Ann. Soc. Ent. Belg., 1900, p. 436.
Drucei, Schs., Nom. Nov. = N. sabella, Druce ô (nec of), Biol. Centr. Amer. Lep. Het., ii, t. 92, f. 6.
Marmorea, Schs., sp. nov.
Plumipes, Schs., sp. nov.

## Nystalea marmorea, sp. nov.

Head and thorax dark grey. Abdomen light greyish-brown above, yellowish below. Primaries dark greyish-brown, streaked with black ; the inner and outer lines indistinct; a subterminal dentate light brown line, followed by an irregular line of small velvety brown spots edged with lighter brown ; a terminal row of dark spots extending on to the fringe ; at the apex, inner angle, and from the middle of costa, through discal spot, large white spaces on which the lines are more clearly defined ; the discal spot large, fine, linear, brown. Secondaries with the basal half semi-hyaline white, the outer half smoky black; the fringe whitish.

Expanse $50 \mathrm{~m} . \mathrm{m}$.
Hab. Trinidad, B. W. I.

## Nystalea plumipes, sp. nov.

Head and collar brown, thorax grey. Abdomen brown above, testaceous at base and underneath. Primaries grey speckled with reddish-brown scales, and shaded with light green ; wavy basal,
median and outer brown lines, the last followed by a broad brown and dark grey shade ; a subterminal velvety black line ; a terminal blackish line, the latter much less distinct ; a row of velvety black points in the cell, and one point beyond it on the subcostal. Secondaries brown, whitish at the base ; the fringe testaceous.

Expanse $42 \mathrm{~m} . \mathrm{m}$.
Hab. Aroa, Venezuela.

## Pentobesa, gen. nov.

Antennæ fasciculate. Palpi : second joint long ; third joint short. Head tufted posteriorly. Anal segment with long scales, bifid in male. Wings long and narrow. Primaries: the outer margin slightly oblique ; vein 5 from middle of discocellular ; 6 from upper angle of cell ; 7 and 8 stalked ; 10 from end of areole. Secondaries : veins 3 and 4 apart ; 6 and 7 stalked ; 8 close to 7 to near end of cell, then diverging slightly.

Type. Pentobesa xylinoides, Walk. Xylinoides, Walk. (Edema), Cat. Lep. Het., B. M. xxxv, p. 1931 (1866) = Pinna, Druce (Symmerista), Biol. Centr. Amer. Lep. Het., i, p. 239, t. xxv, fig. 9 (1887). Valta, Schs., sp. nov.

## Pentobesa valta, sp. nov.

Head and collar brownish ; patagie white inwardly bordered with buff. Primaries buff thinly irrorated with black scales, and shaded with brown above the median vein and vein 5 , also below the submedian vein; a subterminal row of intervenal black points, outwardly shaded with grey ; a distinct black discal point. Secondaries white ; a terminal smoky line ; fringe white.
Expanse $40 \mathrm{~m} . \mathrm{m}$.

## Hab. Colombia.

Allied to $P$. xylinoides, Walk.

## Heorta.

Heorta, Walk., Cat. Lep. Het., B. M. xv, p. 1664 (1858).
Femalc. Antennæ simple. Palpi porrect, not extending beyond frons ; third joint minute. Legs not very hairy. Primaries: apex acute; outer margin broad, rounded, very slightly oblique ; vein 5 from middle of discocellular; 6 from areole near angle ; 7 and 8
stalked; 10 from end of areole. Secondaries : veins 3 and 4 from a point ; 6 and 7 stalked; 8 diverging from 7 at middle of cell.

Type. H. roseoalba, Walk.
Roseoalba, Walk., l. c., p. 1665 (1858).

## Theroa, gen. nov.

Female. Antennæ simple. Palpi short, hairy, not extending beyond frons. Legs hairy. Primaries broad; the outer margin rounded, the inner angle rounded; vein 6 from areole near cell; 7 and 8 usually on short stalk. Secondaries: veins 3 and 4 apart; 6 and 7 stalked, 8 diverging from 7 at end of cell.

Type. T. zethus, Druce.
Zethus, Druce (Dasylophia), Biol. Centr. Amer. Lep. Het., ii, p. 454, t. xc, f. 11 (1898).

## Euhyparpax.

## Euhyparpax, Beut., Bull. Am. Mus. Nat. Hist., v, p. 19 (1893).

Antennæ pectinated but not to tips. Palpi very short. Legs pilose. Primaries : costa slightly concave about the middle; apex acute; outer margin slightly rounded; inner angle obliquely rounded ; vein 5 from about middle of discocellular; 6 from upper angle of cell ; 7 and 8 stalked from areole, which is short ; 10 from end of areole. Secondaries: outer margin oblique; veins 3 and 4 from a point; 6 and 7 on short stalk; 8 close to 7 to near end of cell.

Type. Euhyparpax rosea, Beut.
Rosea, Beut., l. c.

## Bardaxima.

Bardaxima, Walk., Cat. Lep. Het., B. M. xiv, p. 1349 (1858).

Gozarta, Walk., Char. Lep. Het., p. 18 (1869).
Antennæ fasciculate. Palpi : third joint long. Primaries : outer margin crenulate; vein 5 from centre of discocellular; 6 from upper angle of cell ; areole long; 7 and 8 from end of areole; 10 from before end. Secondaries: veins 3 and 4 from a point; 6 and 7 stalked.

Type. B. longara, Stoll.

Longara, Stoll., Pap. Exot. Sup., t, 18, f. 3, F., G. (1791) = Lucilinea, Walk. (Bardaxima), l. c., p. 1349 $(1858)=$ Demea, Druce (Nystalea ?), Ann. and Mag. Nat. Hist. (6), xv, p. 50 (1895), Biol. Centr.-Amer. Lep. Het., t. xcii, f. $12=$ Fulgurifera. Walk. (Gozarta), Char. Lep. Het., p. 18 (1869).
Marcida, Feld., Reise Nov., t. 98, f. 2 (1874).
Perses, Druce (Heterocampa), Ann. and Mag. Nat. Hist. (7) v, p. 516 (1900).
Demera, Schs., sp. nov.

## Bardaxima demera, sp. nov.

Head and collar reddish-brown ; thorax dark grey. Abdomen brown above, testacous below. Primaries grey, shaded with brown along the costa, and beyond the outer lines; the lines wavy, irregular ; basal and inner lines geminate, dark grey ; a short dark transverse median line in the cell, followed on subcostal by a small greyish annular spot ; a fine black line surmounting a velvety black spot at the end of the cell ; below the end of the cell; a dark grey patch: an oblique dark wavy line beyond the cell, joining the outer line near the inner margin ; the outer line geninate, wavy, outwardly spotted with black; and followed by a series of irregular black spots; a subterminal lunular black line, and a terminal wavy black line; an apical spot, whitish towards the base and outwardly reddish-brown, enclosing a velvety black spot; fringe brown, spotted with grey. Secondaries brown, fringe paler.

Expanse 60 m.m.

## Hab. Demerara.

## Phedosia.

## Phedosia, Möschl., Verh. Zool.-bot. Ges. Wien, xxvii, p. 691 (1878).

Antennæ fasciculate, almost as long as primaries. Palpi long, thickly covered with short hairs ; third joint long. Anal tuft. Legs very hairy ; tarsi partly hairy. Primaries : outer margin convex, slightly crenulate ; inner angle rounded ; vein 5 much nearer 6 than $4 ; 7,8,10$ from end of areole. Secondaries : veins 3 and 4, also 6 and 7 from a point.

Type of Genus. P. turbida, Möschl. Turbida, Möschl., l. c. (1878), t. x, f. 49.

## Elymiotis.

Elymiotis, Walk., Cat. Lep. Het., B. M. xi, p. 609 (1857). Cicynna, Walk., l. c., xiii, p. 1104 (1857).

Antennæ fasciculate. Palpi : second joint very hairy ; third joint short; extending beyond frons. Primaries: outer margin crenulate; vein 5 from above centre of discocellular ; 6 from upper angle of cell; 7 and 8 from end of areole. Secondaries: veins 3 and 4 from a point, 6 and 7 from a point or short stalk.

Type. E. notodontoides, Walk.
Notodontoides. Walk., l. c., xi, p. 609 (1857)=Sericea, Walk. (Cicynna), l. c., xiii, p. 1105 (1857) $=$ Phaleroides, Walk. (Nystalea), l. c., xxxiii, p. 760 (1865).
Attenuata, Walk. (Nystalea), l. c., xv, p. 1743 (1858)= Ancora, Feld. (Nystalea), Reise Nov., t. 97, f. 8 (1874); $q=$ Purpurascens, Butl. (Amphipyra), Trans. Ent. Soc. 1879, p. 37.
Longicornis, Feld. (Nystalea), 1. c., t. 97, f. 5 (1874).
Audax, Druce (Edema), Ann. and Mag. Nat. Hist. (7) vii, p. 76 (1901).

Alata, Druce (Edema), P. Z. S., 1890, p. 510 ; Biol. Centr. Amer. Lep. Het., ii, t. 90, f. 12. I have not examined this species, but its similarity to Audax, Dr., leads me to suppose it belongs here.
Alector, Druce (Heterocampa), Biol. Centr. Amer. Lep. Het., i, p. 238, t. 25, f. 7 (1887).
I place this species temporarily in the genus Elymiotis. The type is a female and has lost its antennæ. The margins are crenulate ; vein 6 from upper angle of cell; 7, 8, 10 from end of areole. Secondaries: veins 3 and 4 are apart; 6 and 7 on short stalk; 8 close to 7 to end of cell.

Ctianopha, gen. nov.
¢. Antennæ fasciculate. Palpi extending beyond frons; second joint long, third short. Collar tufted. Primaries broad ; outer margin slightly crenūlate and angled at vein 3 ; vein 6 from upper angle of cell ; 7, 8 , and 10 from end of areole. Secondaries: veins 3 and 4 from a point ; 6 and 7 stalked ; 8 close to 7 to near end of cell.

Type. C. argyria, Butl.
Argyria, Butl. (Tiauspa), Trans. Ent. Soc. Lond., 1879, p. 36.

## Proclymiotis, gen. nov.

Antennæ fasciculate. Palpi porrect, second joint long. Head with high crest. Tibiæ hairy. Wings broader than in Nystalea. Primaries: outer margin crenulate; veins 3 and 4 apart; 5 from just above centre of discocellular ; 6 from upper angle of cell ; 7, 8 , 10 from areole. Secondaries: veins 3 and 4 from a point; 6 and 7 on short stalk.

Type. P. rquipars, Walk.
Equipars, Walk. (Nystalea), Cat. Lep. Het., B. M. xv, p. 1742 (1858) = Seminivea, Walk. (Heterocampa), Char. Lep. Het., p. 17, n. 28 (1869) = Divisa, Möschl. (Nystalea), Verh. Zool.-bot. Ges. Wien, xxxii, p. 343, t. 18, f. 32 (1883).

Xylophasioides, Butl. (Etobesa), Trans. Ent. Soc. Lond., 1878, p. 68.
Arpia, Schs., sp. nov.

## Proelymiotis arpia, sp. nov.

Primaries : outer two-thirds of costal and inner margins pale buff, otherwise violaceous-brown, with paler intervenal longitudinal lines towards the outer margin; a whitish subterminal spot between veins 3 and 4 ; traces of a buff, lunular, outer line between veins 2 and 5 ; a thick dark streak below the median vein on the basal half. Secondaries brown ; the fringe buff.

Expanse 40 m.m.

## Hab. Rio Janeiro, Brazil.

## Lysana.

Lysana, Möschl., Verh. Zool.-bot. Ges. Wien, xxxii, p. 347 (1883).
¢. Antennæ serrate-fasciculate; a long tuft of hair at base of antenna. Palpi upturned, extending above head; second joint long third joint very short. Fore legs very hairy. Primaries broad; apex not acute ; costal margin before apex slightly depressed ; outer margin rounded ; vein 5 from above middle of discocellular ; 6 from areole; 7, 8, 10 from end of areole. Secondaries: veins 3 and 4 on short stalk; 6 and 7 on longer stalk; 8 diverging from near base of cell.

Type. Lysana plexa, Möschl.
Plexa, Möschl., l. c., p. 348 (1883), t. 18, f. 36.
Plusiana, Schs., sp. nov.
trans. Ent. soc. Lond. 1901.-PART III. (SEPT.)

## Lysana (?) plusiana.

Head and thorax lilacine-grey mottled with reddish-brown. Abdomen grey ; a brown dorsal patch at base. Primaries lilacine-grey mottled with light olivaceous-brown ; a light brown shade near base of costa and cell ; an oblique white line from submedian vein at onefourth from base to end of cell followed by a dark and cupreous brown space ; an oblique white line on inner margin at one-third from base to submedian vein followed by some cupreous-brown ; a blackish streak from cell to near outer margin between veins 4 and 5 ; the outer margin brownish above vein 3, with reddish and cupreous shadings and an oblique white streak between veins 4 and 5 ; fringe mottled light and dark grey. Secondaries: brown in the $\circ$; the basal two-thirds white in the $\delta$, the outer margin brown; some reddish-brown mottlings above anal angle crossed by a white line.

Expanse of $25 \mathrm{~m} . \mathrm{m}$. ; $\ddagger 31 \mathrm{~m} . \mathrm{m}$.
Hab. Aroa, Venezuela.
Differs from Möschler's description of Lysana in having smooth legs.

## Pseudantiora.

Pseudantiora, Kirby, Cat. Lep. Het., vol. i, p. 566.
Antiora, Möschl., Verh. Zool.- bot. Ges. Wien, xxxii, p. 346 (1883).

Antennæ fasciculate. Palpi ascending ; second joint twice as long as third. Head with tuft. Primaries : outer margin broad, rounded; vein 5 from above centre of discocellular ; 6 from areole near cell ; 7, 8,10 from end of areole. Secondaries: veins 3 and 4 from a point or short stalk; 6 and 7 stalked.

Type. P. contingata, Möschl.
Contingata, Möschl. (Antiora), l. c., p. 347, t. 18, f. 35 (1883).

## Cottobara.

Cottobara, Walk., Trans. Ent. Soc. Lond., 1862, p. 95.
ๆ. Antennæ finely fasciculate. Palpi ascending, thickly scaled; third joint minute. Primaries: vein 5 from above middle of discocellular; 6 from areole near cell ; 7, 8, 10 from end of areole. Secondaries: veins 3 and 4 stalked ; 6 and 7 on longer stalk; 8 very close to 7 to end of cell.

Type. C. concinna. Concinna, Walk., l. c.

## Marthula.

Marthula, Walk., Cat. Lep. Het., B. M. ix, p. 164 (1856).
Antennæ fasciculate. Palpi hairy, smooth; third joint small. Long anal tuft, usually fan-shape. Primaries: outer margin straight, rounded below vein 4 ; vein 5 from just above middle of discocellular; 6 from upper angle of cell; 7, 8 and 10 from end of areole. Secondaries: veins 3 and 4 apart ; 6 and 7 stalked.

Type. M. quadrata, Walk. Quadrata, Walk., l. c., p. 164 (1856), t. xi, f. 2. Multifascia, Walk. (Xanthia), 1. c., x, p. 466 (18566)= Nora, Schs. (Marthula), P. Z. S., 1892, p. 341. Pleione, Schs. (Marthula), P. Z. S., 1892, p. 341.

Antiopha, gen. nov.
Male antennæ very long, serrate with long tufts of hairs. Palpi upturned; third joint very minute. Thorax hairy below. Legs smooth. Primaries short and broad, convex at apex and middle of outer margin ; areole long ; vein 6 from near angle of cell ; 7, 8 and 10 from end of areole. Secondaries : veins 3 and 4 from a point; 6 and 7 on short stalk.

## Type. A. multilinea.

Multilinea, Schs., sp. nov., t. xi, f. 3 ㅇ.
Collaris, Schs., sp. nov.

## Antiopha multilinea, sp. nov.

Body brown above, below greyish ; the collar somewhat reddish. Primaries dark lilacine and grey; the veins and intervenal streaks dark reddish-brown; a few minute yellow specks about apex, on median and submedian veins; a terminal row of small yellow spots inwardly shaded with reddish-brown. Secondaries brown, paler at the base and with the fringe white.

Expanse $32 \mathrm{~m} . \mathrm{m}$.
Hab. Rio Janeiro; Castro, Brazil.

## Antiopha collaris, sp. nov.

Palpi, head and collar dark velvety-brown. Patagiæ fawn-colour. Primaries whitish along inner margin and to vein 4 , speckled with reddish-brown; otherwise heavily shaded with reddish-brown, showing traces of an inner and outer pale line more heavily shaded
with brown on either side; some terminal, lunular, brown spots on pale portion of wing. Secondaries whitish, outwardly shaded with reddish-brown.
Expanse 38 m.m.
Hab. Castro, Parana.

## Eragisa.

Eragisa, Walk., Cat. Lep. Het., B. M. xv, p. 1650 (185̃8).
Antennæ fasciculate. Palpi ascending, thickly scaled ; third joint minute. Fore legs very hairy. Primaries : outer margin rounded ; vein 5 from about middle of discocellular ; 6 from upper angle of cell ; 7, 8,10 from end of areole. Secondaries : veins 3 and 4 from lower angle of cell ; 6 and 7 on short stalk; 8 diverging from 7 at middle of cell ; base below thickly scaled.

Type. E. lanifera, Walk.
Lanifera, Walk., l. c., 1657 (1858).

## Crinodes.

Crinodes, H. S. Ausser.-Europ. Schmett., i, p. 11 (1855). Astylis, Boisd., Ann. Soc. Ent. Belg., xv, p. 94 (1872).

Antennæ fasciculate. Palpi not extending beyond frons, thickly scaled, smooth ; third joint short. Head with small conical tuft. High thoracic tuft. Anal tuft of spatulate scales. Primaries: vein 5 from middle of discocellular ; 6 from upper angle of cell ; 7, 8, 10 from end of areole. Secondaries : veins 3 and 4 slightly apart ; 6 and 7 stalked.

Type. C. bellatrix, Stoll.
Bellatrix, Stoll., Pap. Exot., iv, t. 305, E. (1781).
Besckei, Hübn. (Crino), Samml. Ex. Schmett., ii. (1824) = Abscondens, Druce (nec Walker), Biol. Centr. Amer., ii, t. xcii, f. 7.
Dissimilis, Grote (Crino), Trans. Am. Ent. Soc., iii, p. 183 (1870).

Ritsemæ, Butl., Ann. Nat. Hist. (5) ii, p. 172 (1878).
Guatemalena, Druce, Biol Centr. Amer. Lep. Het., i, p. 246, t. 25, f. 2 (1887).

Striolata, Schs., sp. nov.
Nebulosa, Schs., sp. nov.

## Crinodes striolata.

Head and thorax violaceous-brown. Body pale brown. Primaries brown irrorated with dark velvety strix, especially in the median space and beyond the cell ; the median space on inner margin nearly black; the base and basal third of costa lighter brown, limited by a light brown line outwardly oblique from inner margin near the base to subcostal vein, where it forms two long dentations on costal margin to near the middle of wing; these dentations made more distinct by a blackish line ; a dark transverse discal streak; a faint dark shade representing the outer line; the outer margin shaded with violaceous-grey; subterminal dark points most conspicuous above vein 5 ; a terminal dark line; fringe basally light brown, outwardly dark brown. Secondaries lighter brown ; a broad subterminal darker shade.
Expanse 76 m.m.

Hab. Pernambuco, Brazil.

## Crinodes nebulosa.

Head dark grey. Thorax posteriorly dark velvety-brown ; the patagiæ and collar grey. Abdomen ochreous dorsally ; some greyish hairs at base and laterally ; anal tuft brown. Primaries dark grey ; a discal streak preceded by some lighter grey scales; some paler grey scales at base and along inner margin ; a darker shade beyond the cell, divided by the outer line, which is broad, light grey, slightly curved inwardly below vein 6 ; a terminal lunular pale grey line. Secondaries pale brown at base shading to dark brown on outer margin ; some grey scales at anal angle ; fringe buff above vein 3 , dark grey below it.

Expanse 59 m.m.

## Hab. Tucuman.

Poresta, gen. nov.
Antennæ fasciculate. Palpi porrect, nearly smooth ; third joint long. A large frontal tuft. Primaries broad ; costal margin straight; apex acute ; outer margin straight, well rounded at inner angle; vein 6 from areole near cell ; 7, 8, 10 from end of areole. Secondaries : outer margin rounded, slightly obtuse towards anal angle; veins 3 and 4 from lower angle of cell; 6 and 7 on short stalk.

Type. $P$. lanassa, Druce.
Lanassa, Druce (Edema), P. Z. S., 1890, p. 509; Biol. Centr. Amer. Lep. Het., ii, t. xc, f. 9.
Thermesia, Feld. (Nystalea), Reise Nov., t. xcvii, f. 9 (1874).

## Lepasta.

Lepasta, Möschl., Verh. Zool.-bot. Ges. Wien, xxv ii, p. 694 (1877).

Antennæ fasciculate. Palpi long ; second joint extending beyond frons ; third joint almost as long as second. Head with raised tuft. Primaries : vein 5 from centre of discocellular ; 6 from upper angle of cell ; 7, 8,10 from end of areole. Secondaries : veins 3 and 4 from a point ; 6 and 7 stalked.
Type of genus. L. bractea, Feld.
Bractea, Feld. (Nystalea), Reise Nov., t. xcvii, f. 3 (1874).
Grammodes, Feld. (Nystalea), l. c., f. 1.
Conspicua, Butl., Trans. Ent. Soc. Lond., 1878, p. 71.
Mixta, Möschl., l. c., xxxii, p. 349, t. 18, f. 37 (1883).
Lignistriata, Schs., sp. nov.
Calophasioides, Kaye (Nystalea), Trans. Ent. Soc. 1901, p. 137, pl. v. f. 2. In this species vein 6 is from areole near angle of cell; it may be the same as Mixta, Möschl.

## Lepasta lignistriata, sp. nov.

Head and thorax dark brown. Abdomen light brown. Primaries greyish speckled with brown, especially along the costa, making it much darker ; numerous darker streaks between the veins ; a terminal row of black points ; a black and grey spot on costa near base ; 4 small white spots on costa towards apex. Secondaries reddish-brown, paler towards base.
Expanse 33 m.m.
Hab. Rio Janeiro.

## Tachuda, gen. nov.

Antennæ fasciculate. Palpi hairy upturned, third joint small. Legs hairy, the spines on hind tibia rather prominent. Primaries long, narrow, almost as broad at base as at outer margin, the latter margin slightly convex ; the inner margin hairy at the base; veins 3 and 4 well apart; 6 from just beyond upper angle ; a short accessory cell, with $7,8,10$ from its extremity, 9 stalked with 8. Secondaries with 3 and 4 from a point; 6 and 7 on short stalk.

Type. T. albosigma, Druce.
Albosigma, Druce (Lochmæus), Biol. Centr. Amer. Lep. Het., i, p. 236 (1887) ; ii, 'I'. 90, f. 17.

This species is widely spread and varies considerably; Brazilian and Trinidad specimens are usually paler with the markings more defined.

## Contrebia.

Contrebia, Walk., Cat. Lep. Het., B. M., ix, p. 134 (1856).
Antennæ fasciculate. Palpi porrect, third joint long. Primaries long; apex acute, slightly falcate; vein 5 from above centre of discocellular ; 6 from upper angle of cell; 7 and 8 from end of areole ; 10 from just before end of areole. Secondaries: veins 3 and 4, also 6 and 7 stalked.

Type. C. extrema, Walk.
Extrema, Walk., l. c. (1856).

## Hyparpax.

Hyparpax, Huibn., Samml. Exot. Schmett., ii. (1824). Sangata, Walk., Cat. Lep. Het., B. M. xx, p. 265 (1860).

Antennæ pectinated to tips. Palpi : third joint short. Primaries : vein 5 from centre of discocellular ; 6 from areole usually near upper angle of cell ; 7, 8, 10 from end of areole. Secondaries: veins 3 and 4 apart ; 6 and 7 stalked.

Type. H. aurora, Sm. and Abb.
Aurora, Sm. and Abb. (Phalæna), Lep. Georg., ii, t. 87 $(1797)=$ Rosca, Walk. (Sangata), l. c., xx, p. 265 $(1860)=$ Venusta, Walk. (Dryocampa), l.c., xxxii, p. 574 (1865).

Perophoroides, Strecker (Cosmia), Proc. Acad. Nat. Sci. Phil. (1876), p. 152 = Aurostriata, Graef. (Hyparpax), Ent. Amer., iv, p. 58 (1888).
Venus, Neum., Can. Ent., xxiv, p. 226 (1892).

## Kalloma, gen. nov.

Antennæ with short pectinations to tips. Palpi porrect ; third joint smooth. Legs thinly haired. Primaries long; apex and outer margin well rounded; areole long, very narrow ; vein 5 from above middle of discocellular ; 6 from areole near cell ; 7, 8,10 from end of areole. Secondaries: veins 3 and 4 from a point; 6 and 7 stalked.

Type. Kalkoma alla, Druce,

Alba, Druce (Symmerista), Biol. Centr. Amer. Lep. Het., ii, p. 460, t. xci, f. 3 (1898).
Pylaon, Druce (Heterocampa (?)), l. c., ii, p. 459 , t. xci, f. i (1898). I have not examined this species, and place it here with doubt.

## Didugua.

Didugua, Druce, Biol. Centr. Amer. Lep. Het., i, p. 483 (1891).

Antennæ pectinated, but not to tips. Palpi very long ; third joint almost as long as second, smooth. Head with high crest. Primaries : outer margin broad, rounded; vein 5 from above centre of discocellular ; 6 from upper angle of cell ; 7, 8,10 from end of areole. Secondaries: 3 and 4 from a point; 6 and 7 stalked.

Type. D. argentilinea, Druce.
Argentilinea, Druce. l. c., 483, t. xl, f. 13 (1891).
Lcona, Druce (Heterocampa ?), l. c., ii, p. 459 , t. xci, f. 6 (1898).

## Dasylophia.

Dasylophia, Packard, Proc. Ent. Soc. Phil., iii, p. 362 (1864).

Antennæ pectinated but not to tips. Palpi: third joint short. Head with tuft. Primaries : vein 5 from about the centre of discocellular ; 6 from upper angle of cell or from areole close to cell ; 7, 8, 10 from end of areole. Secondaries: veins 3 and 4 close together ; 6 and 7 stalked.

Type. D. anguina, Sm. and Abb.
Anguina, Sm. and Abb. (Phalæna), Lep. Georg., ii, t. 84 (1797), $=$ Cucullifera, H. S. (Drymonia), Ausser.Europ., Schmett., i, f. 381 (1855) = Punctata, Walk. (Heterocampa), Cat. Lep. Het., B. M. xxxii, p. $420=$ Cana, Walk. (Edema), Char. Lep. Het., p. 17 (1869).
Thyatiroides, Walk. (Heterocampa), Trans. Ent. Soc. Lond., 1862, p. $79=$ Interna, Pack. (Dasylophia), l. c., p. 363 (1864) = Tripartita, Walk. (Heterocampa), Cat. Lep. Het., B. M. xxxii, p. 419 (1865) = Signata, Walk. (Xylina), l. c., xxxiii, p. 121 (1865).
Xylinata, Walk. (Nystalea), l.c., xxxiii, p. 759 (1865) = Pythia, Druce (Notodonta ?), Ann. and Mag. Nat. Hist. (6) xiịi, p. 356 (1894) ; Biol. Centr. Amer. Lep. Het., ii, t. 90 , f. 7.

T'errena, Schs. (Oedemasia), P. Z. S., 1892, p. $331=$ Dares, Druce (Notodonta), Ann. and Mag. Nat. Hist., (6), xiii, p. 356 (1894); Biol. Centr. Amer. Lep. Het. ii, t. 90 , f. 6.
Lignicolor, Möschl. (Dasylophia ?), Verh. Zool.-bot. Ges., Wien, xxvii, p. 687, t. 10, f. 46 (1877) = Exusta, Butl. (Tifama), Trans. Ent. Soc. Lond., 1878, p. 68, t. 3, f. 10.
Maxtla, Schs. (Oedemasia), 1. c., p. 331.
Guarana, Schs. (Oedemasia), l. c., p. 331.
Inca, Schs. (Oedemasia,) l. c., p. 332.
Seriata, Druce (Oedemasia), l. c., i, p. 235, t. 20, f. 1 (1887) $=$ Melanopa, Barnes, Can. Ent., 1901, p. 54.
Lupia, Druce (Heterocampa), l. c., i, p. 238 (1887).
Poccila, Feld. (Nycterotis), Reise Nov., t. 97, f. 20 (1874) $=$ Fulgens, Druce (Symmerista), Ann. and Mag. Nat. Hist. (7), v, vii, p. 75 (1901).
Mocosa, Dogn. (Oedemasia), Ann. Soc. Ent. Belg., xxxix, p. 107 (1895).
Saturata, Barnes, Can. Ent., 1901, p. 53.
Lucia, Schs., sp. nov.
Abbreviata, Schs., sp. nov.
Jaliscana, Schs., sp. nov.
Grenadensis, Schs., sp nov.
Franzina, Schs., sp. nov.

## Dasylophia lucia, sp. nov.

t. Antennæ deeply pectinated for $\frac{3}{5}$ ths of length. Body fawncolour. Primaries fawn-colour ; some darker shadings and black specks along costa, inner margin, and outer portion of veins; a terminal row of blackish dashes preceded by some similar dark brown marks ; an indistinct outer line, marked and followed by brown spots near the inner margin. Secondaries white with a terminal brown shade.
i. Greyer, the patagiæ nearly white, inwardly edged with brown and with a black line ; a large oval white spot at base below median vein ; the markings otherwise a little more defined than in the male. Secondaries as in the of.

Expanse đ $34 \mathrm{~m} . \mathrm{m}$. ; $\uparrow 47 \mathrm{~m} . \mathrm{m}$.
Hab. St. Lucia, B. W. I.

## Dasylophia abbreviata, sp. nov.

Heal and thorax greyish fawn-colour ; the posterior tufts on thorax violaceous-brown. Primaries fawn-colour, thickly shaded
with brown and olivaceous-green ; a distinct inner and outer wavy white line ; the inner margin darkest ; a cluster of black scales on outer margin above vein 2 , and a darker shade between veins 3 and 4 ; a black spot in the cell. Secondaries yellowish white in the $\begin{gathered}\text { o } \\ \text {, }\end{gathered}$ brown in the $q$ with a transverse paler median shade. The wings are proportionately shorter and broader than in the other species of Dasylophia.
Expanse of $32 \mathrm{~m} . \mathrm{m}$. ; ㅇ $40 \mathrm{~m} . \mathrm{m}$.
Hab. Castro, Parana.
Dasylophia jaliscana, sp. nov.
d. Antenne pectinated to near tips. Head dark grey; thorax dorsally almost black. Primaries grey speckled with white, the veins black ; a black transverse line at end of cell ; two geminate black transverse lines filled in with paler grey; the inner line almost straight from costa to median at vein 2 , then curved in to submedian and then outwardly oblique to inner margin ; the outer line slightly wavy and nearly straight from costa to anal angle ; a subterminal irregular brownish shade, followed by black spots between veins 2-4, and a terminal black line; fringe pale with central greyish shade. The $q$ has the basal and outer portion of wing shaded with reddishbrown, and the outer geminate line is of the same colour. Secondaries in both sexes whitish at the base, brownish on the outer half with a terminal dark line and paler fringe.
Expanse of $31 \mathrm{~m} . \mathrm{m}$.; ㅇ $33 \mathrm{~m} . \mathrm{m}$.
Hab. Guadalajara, Mexico.

## Dasylophia grenadensis, sp. nov.

ㅇ. Palpi and head fawn-colour, thorax and abdomen slightly darker. Primaries dark fawn-colour, the outer portion of the veins streaked and speckled with black, and long dark streaks between veins 4-6; a small dark streak and spot in the cell, followed by a dark reddish-brown shade not quite reaching the inner margin; a broad terminal dark shade not extending above vein 7; a terminal row of dark spots between the veins, most distinct at apex. Secondaries smoky, the base and disc whitish, the veins black.

Expanse $45 \mathrm{~m} . \mathrm{m}$.
Hab. Grenada, B. W. I.

## Dasylophia franzina, sp. nov.

Body light brown ; a transverse black line on collar ; a black line on patagire towards dorsum. Primaries light brown; the
costa and a shade above submedian from base to anal angle violaceousgrey; some blackish specks along subcostal and terminal veins; a dark brown shade near base below the submedian ; an interrupted dark brown streak in the cell, and an oblique brown shade from cell to outer line above submedian ; the outer line is broad, whitish, and shaded on either side with patches of dark brown scales; some terminal whitish dashes between veins 4 and 7 ; fringe brown spotted with black at tips of veins. Secondaries brown the fringe fawn-colour.

Expanse $45 \mathrm{~m} . \mathrm{m}$.

## Hab. São Paulo, Brazil.

## Farigia, gen. nov.

Antennæ pectinated on basal two-thirds. Palpi extending beyond frons, hairy ; third joint minute. Primaries ; outer margin rounded, oblique ; vein 5 from middle of discocellular ;.6 from upper angle of cell ; areole very long and narrow ; 7 and 8 from end of areole ; 10 from before end of areole. Secondaries: veins 3 and 4 apart ; 6 and 7 stalked ; 8 diverging from 7 at end of cell.

Type. F. sagana, Druce.
Sagana, Druce (Heterocampa), Ann and Mag. Nat. Hist. (6) xiii, p. 357 (1894) ; Biol. Centr. Amer. Lep. Het. ii, t. 90 , f. 23.
Montana, Druce (Heterocampa), l. c., ii, p. 457, t. 90, f. 19 (1898).

Gamarra, Dogn. (Heterocampa), Le Naturaliste, 1890, p. 128 ; Lep. de Loja, p. 56, pl. 5, f. 5.

Mina, Druce (Heterocampa), Ann. and Mag. Nat. Hist. (7) v, p. 515 (1900).
Pallida, Schs. (Lophodonta ?), P. Z. S., 1894, p. 242.
Musara, Schs., sp. nov.
Vecina, Schs., sp. nov.
Hydriana, Schs., sp. nov.

## Farigia musara, sp. nov.

Head and thorax light grey. Abdomen light reddish-brown. Primaries grey, shaded with brown on the outer and inner margins, and tinged with pink in the disk; a fine angular brown line at the base ; the inner line geminate, interrupted, and very irregular, dark brown filled in with light greenish scales; the outer line better defined and forming a more regular curve, geminate, blackish; filled in with greenish-yellow scales; this line is outwardly broadly
shaded with green, except between veins 4 to 6 ; an angular terminal dark line. Fringe brown spotted with fawn-colour : secondaries brown.
Expanse 42 m.m.

## Hab. Castro, Parana.

## Farigia vecina, sp. nov.

Head and thorax mottled grey and brown hairs. Aldomen brown. Primaries dark brown speckled with greyish ; the basal third of the costa and the apex broadly more greyish ; the inner line dark brown, indistinct, more or less shaded with green scales; outer line very dark brown, intercepted by the veins and forming a large outward curve, shaded on either side with green scales; the outer margin speckled with green ; a subterminal angular dark line. Secondaries brown ; the fringe partly greyish.

Expanse $\uparrow 48$ m.m.
Hab. Orizaba, Mexico.

## Farigia hydriana, sp. nov.

Head and thorax mottled dark brown and grey. Abdomen reddish-brown, darkest subdorsally. Primaries greyish-brown, darkest on the inner margin ; at the base of the costa some light green scales; a brown discal spot; between the median and submedian veins a dark brown shade from the base to the subterminal line, which is wavy and also dark brown. Secondaries brown; the fringe partly grey.

Expanse ơ $39 \mathrm{~m} . \mathrm{m}$. ; ㅇ $47 \mathrm{~m} . \mathrm{m}$.
Hab. Jalapa, Mexico ; Aroa, Venezuela.

## Pseudodryas.

Pscudodryas, Möschl., Verh. Zool.-bot. Ges. Wien, xxvii, p. 685 (1878).
Female antennæ pectinated on basal two-thirds. Palpi upturned, hairy ; the third joint small. Primaries narrow ; apex rounded; outer margin rounded, oblique; vein 5 from above middle of discocellular ; 6 from areole, nearer cell ; areole long and narrow ; 7, 8, 10 from end of areole. Secondaries : veins 3 and 4 close together ; 6 and 7 on short stalk ; 8 close to 7 on basal third of cell.

Type. P. olivacea, Möschl.
Olivacea, Möschl., l. c., p. 685, t. x, f. 43 (1878).

Eustema, gen. nov.
Antennæ pectinated for four-fifths of their length. Palpi porrect, short. Legs moderately hairy. Wings long, fairly broad. Primaries : veins 3 and 4 apart; 5 from above middle of discocellular ; 6 from upper angle of cell; 7, 8, 10 from end of areole. Secondaries : vein 8 close to 7 to end of cell; 3 and 4 from a point; 6 and 7 stalked.

## Type. Eustema dura, Druce.

Dara, Druce (Stilpnotia ?), Ann. and Mag. Nat. Hist. (6) xiii, p. 355 (1894); Biol. Centr. Amer. Lep. Het., ii (Notodonta), p. 463, t. xcii, f. 1.

## Tecmessa.

Teemessa, Burm., Desc. Rep. Arg., v, p. 504 (1882).
Antennæ with short basal pectinations in the male, serrate in the female. Palpi short, hairy, not extending beyond frons. Tibia with long hairs ; tarsi smooth. Primaries fairly broad; the costal and inner margins straight ; the outer margin rounded ; vein 6 from upper angle of cell ; 7, 8, 10 from end of long areole. Secondaries broad ; the costal margin rounded ; veius 3 and 4 apart ; 6 and 7 stalked.

Type of Genus. T'. annulipes, Berg.
Annulipes, Berg. (Thosea), Ann. Soc. Arg., v, p. 186 (1878) $=$ Phyllis, Druce (Cerura), Ann. and Mag. Nat. Hist. (7) v, p. 517 (1900).

Elegans, Schs., sp. nov., t. xi, f. 4.

## Teemessa elegans, sp. nov.

Head and thorax white, posteriorly on the latter a large black spot. Abdomen grey above, white below. Primaries dull greyishwhite ; basal and inner fine geminate black transverse lines, angled at margins and forming two outward curves between ; a fine geminate outer line, irregular and forming inward curves between the veins, preceded and followed on the costa by some black markings, and followed at the inner angle by a large black spot ; some smaller subterminal black spots. Secondaries white, with a broad terminal smoky band and a large blackish spot at the anal angle ; fringe white.
Expanse $42 \mathrm{~m} . \mathrm{m}$.

> Hab. Castro, Parana.

## Psorocampa, gen. nov.

Antennæ pectinated for two-thirds of their length, then finely serrate to tips. Palpi porrect, hardly extending beyond head ; third joint very minute. Legs hairy. Primaries broad, the costa straight, outer margin slightly rounded, inner margin bulging somewhat towards base ; vein 5 from above middle of discocellular ; vein 6 from upper angle of cell; vein 10 anostomosing with 8 to form long areole ; vein 7 from end of areole; 9 stalked with 8. Secondaries with the costal and inner margin straight, the outer margin evenly rounded; veins 3 and 4 from lower angle of cell ; 6 and 7 on short stalk.

Type. P. denticulata, Schs.
Denticulata, Schs., sp. nov., t. xi, f. 5.

## Psorocampa denticulata, sp. nov.

Body light grey. Primaries light grey with two transverse dentate black lines outwardly shaded with fawn-colour scales ; the inner line very oblique from costa to middle of inner margin ; the outer line subterminal ; a small black spot on costa beyond cell. Secondaries varying from pure white to dark slaty-grey.
Expanse 45 m.m.
Hab. Castro, Parana.

## Hippia.

Hippia, Möschl., Verh. Zool.-bot. Ges. Wien, xxvii, p. 693 (1878).

Elasmia, Möschl., Abhandl. Senckenb. Ges., xiv, p. 36 (1886).

Harma, Walk., Cat. Lep. Het., B. M. xiii, p. 1105 (1857).
Antennæ fasciculate in the $\delta$, simple in the $\mathcal{q}$. Palpi: third joint long. Primaries : costa slightly convex ; apex acute ; outer margin broad, rounded ; vein 6 from end of areole ; 7-10 stalked. Secondaries broad; veins 3 and 4, also 6 and 7 from a point or slightly stalked.

Type. Hippia mumetes, Cr.
Mumetes, Cr. (Tortrix), Pap. Exot. i. t., 82, A. (1775).
Pulchra, Butl. (Edema), Trans. Ent. Soc. Lond., 1878, p. 64, t. 3, f. 4.

Insularis, Grote (Edema), Proc. Ent. Soc. Philad., vi, p. 321 $(1867)=$ Lignosa, Möschl. (Elasmia), l. c., fig. 30
$(1886)=$ Mandela, Druce (Edema), Biol. Cent. Amer. Lep. Het., i, p. 235, t. 25, fig. 3 (1887).
Astuta, Sch. (Edema), P. Z. S., 1894, p. 242 = Anica, Druce (Edema), Biol. Cent. Amer. Lep. Het., p. $45 \check{5}$, t. xc, fig. 13 (1898).
Matheis, Sch. (Edema), P. Z. S., 1892, p. 332.
Vittipalpis, Walk. (Harma), Cat. Lep. Het., B. M. xiii, p. 1106 (1857).
This is possibly the same as $H$. insularis, Grote, and synonyms ; it is very similar, but greyer in tone. If idenical Vittipalpis would have priority.
Talae, Berg. (Hyboma), An. Soc. Arg., v, p. 184 (1878), probably belongs to this genus; the species is unknown to me. Harma, the oldest name for the genus is preoccupied.
Packardi, Morr. (Edema), An. Lyc. Nat. Hist., N. Y., xi, p. 92 (1875).

## Symmerista.

Symmerista, Hübn., Verz. Vek. Schmett., p. 248 (1818). Edema, Walk., Cat. Lep. Het., B. M. v, p. 1028 (1855).

Male antennæ shortly pectinated on basal two-thirds. Palpi: second joint extending beyond frons ; third joint short. Primaries broad; vein 5 from above centre of discocellular ; 6 from end of areole ; 7-10 stalked. Secondaries : veins 3 and 4 from a point ; 6 and 7 stalked.

Type. S. albifrons, Sm. and Abb.
Albifrons, Sm. and Abb. (Phalæna), Lep. Ins. Georg., ii, t. $8(1797)=$ Albicosta, Hübn. (Noctua), Eur. Schmett. Noct., f. $440(1804 ?)=$ Albifrons, Walk. (Edema), l. c. 1029 (1855).
Tlotzin, Schs. (Edema), P. Z. S., 1892, p. 332 ; Biol. Cent. Amer. Lep. Het., ii, t. xc, f. 15.
Suavis, Barnes (Edema), Can. Ent., 1901, p. 53.

## Arhacia.

Arhacia, H. S., Ausser.-Europ. Schmett., i, p. 11 (1855). Anodonta, H. S., l. c., p. 78 (1856).
Male antennæ deeply pectinated to near tips ; simple in the female. Palpi slight, not extending beyond frons; second joint long, third
short. Primaries long, narrow, the inner angle rounded; vein 5 from centre of discocellular ; areole long ; 6 from near end of areole ; 7 and 8 stalked; 10 from before end of areole. Secondaries: veins 3 and 4 close together ; 6 and 7 stalked.

Type. A. combusta, H. S.
Combusta, H. S., l. c., p. 11, ff. 81, 82 (1854) = Fascis, Schs. (Anodonta), Ent. Amer., vi, p. 47 (1890).

## Cerura.

Cerura, Schrank., Fauna Boica, ii, 155 (1802).
Antennæ pectinated to tips. Palpi small. Primaries broad ; vein 6 from end of areole; 7 and 8 stalked. Secondaries: veins 3 and 4 from a point ; 6 and 7 stalked.

Type. C. furcula, Schr., from Europe.
Scitiscripta, Walk., Cat. Lep. Het., B. M. xxxii, p. 408 (1865).

Multiscripta, Riley, Trans. Acad. St. Louis, iii, p. 241 (1875).

Occidentalis, Lintmer, Rep. Mus. N. Y., xxx, p. 194 (1878).

Rarata, Walk., l. c., xxxii, p. 409 (1865); Biol. Centr. Amer. Lep. Het., ii, t. 91, f. 7 (1898).
Platea, Schs. (Dicranura), Ent. Amer., vi, p. 46 (1890).
Dandon, Druce (Harpyia), Ann. and Mag. Nat. Hist. (6), xiii, p. 358 (1894); Biol. Cent. Amer. Lep. Het., ii, t. 91, f. 9.
Annulifera, Berg. (Harpyia), Ann. Soc. Argent., v, p. 183 (1878).

Argynnis, Schs., sp. nov.
Rivera, Schs., sp. nov.
Grandis, Schs., sp. nov.
Cerura argynnis, sp. nov.
Head black, frontal tuft creamy-yellow. Collar white with a dorsal transverse black shade. Thorax white; three large black spots anteriorly, a central black spot, and a black line posteriorly. Abdomen black dorsally, otherwise white ; anal tuft white, with a black transverse line. Primaries silvery white ; sub-basal and basal interrupted black lines, followed by a black ring on the inner margin, one in the cell, contiguous to another on the costal margin, these black rings filled in with greenish-yellow ; a median interrupted black line
followed by a very angular and more heavily marked complete line ; two outer angular and irregular black lines somewhat suffused towards the apex, where there is some greenish-yellow between the lines ; a terminal row of black spots. Secondaries and fringe white in the of with a black point at the anal angle ; in the $f$ dark smoky grey, with the fringe white spotted with black.

Expanse of $31 \mathrm{~m} . \mathrm{m}$. ; ¢ $33 \mathrm{~m} . \mathrm{m}$.

## Hab. Castro, Parana.

Cerura rivera, sp. nov.
Allied and very similar to Cerura argynnis, Schaus. Larger and the spot on inner margin of primaries containing a black pupil. The of has the secondaries quite black and the fringe greyish ; there are also black ventral spots on the abdomen.

Expanse of 38 ; ¢ $40 \mathrm{~m} . \mathrm{m}$.
Hub. Rio Janeiro; Castro, Parana.
Described from 2 ㅎ $\widehat{\sigma}$ and 2 우 우.

## Cerura grandis, sp. nov.

Head black, frontal tuft yellow. Collar black. Thorax creamywhite with two black spots posteriorly. Primaries white shaded with silky-brown from the cell outwards and also between the median and submedian veins; a large black, basal, costal spot, followed by a narrow angular black line slightly interrupted; a large oblique black spot from the costa to median vein, and a smaller black spot on the inner margin, these followed by a narrow angular interrupted black line ; a very irregular median black line, and two outer black lines, the one nearest the margin broadening into black patches at the inner angle, below vein 4, and from above vein 5 to the apex; a terminal row of elongated black spots. Secondaries brown with a terminal row of white spots and two curved black marks on the inner margin above the angle.

Expanse $55 \mathrm{~m} . \mathrm{m}$.

## Hab. Peruvian Amazons.

Betola, gen. nov.
Antennæ $p$ ctinated for two-thirds of their length. Palpi porrect, t'iird joint small. A high frontal tuft. Abdomen stout, long ; anal tuft long, bifurcate. Primaries broad at the outer margin, slightly dentate ; small areole from befure end of cell ; 6 from end of areole.
trans. ent. soc. Lond. 1901.-PART III. (SEPT.) 20

7, 8, 9 stalked; 10 from end of areole; 3 and 4 from a point. Secondaries : veins 6 and 7 stalked; $\mathbf{3}$ and 4 from a point; 8 close to 7 to near the end of cell.

Type. B. aroata, Schs. Aroata, Schs., sp. nov., t. xi, f. 6.

## Betola aroata, sp. nov.

Head and thorax brown, mottled with green and violaceous scales. Primaries violaceous-brown ; a long olive-green spot above the submedian at a third from the base; a large olive green space from below and beyond the cell to the outer margin, this space divided by the outer line which is irregular, wavy, pale fawn-colour ; a broad white dash on the outer margin between veins 4 and 6 ; some black scales at the base of the inner margin, a large cluster in the cell, and two small clusters between veins 2 and 3 on the outer margin. The shadings are rather mottled and streaky. Secondaries white; the margins narrowly brown ; the fringe white.

Expanse 45 m.m.
Hab. Aroa, Venezuela.

## Lirimiris.

Lirimiris, Walk., Cat. Lep. Het., B. M. xxxii, p. 468 (1865).

Antennæ pectinated, but not to tips. Palpi not extending beyond frons. Primaries long and narrow ; above vein 4 , outer margin rounded or truncated, below 4 very oblique ; 6 from end of areole ; 7 and 8 stalked. Secondaries: veins 3 and 4 apart; 6 and 7 stalked.

Type of Genus. L. lignitecta, Walk.
Lignitecta, Walk, l. c., p. 469 (1865) =Argentifera, Druce,
(Tifama), Ann. and Mag. Nat. Hist. (6) iv, p. 92 (1889), Biol. Centr. Amer. Lep. Het., ii, t. xci, f. 20.

Truncrata, H. S. (Notodonta), Ausser.-Europ. Schmett., i, f. 494 (1856).

## GOPHA.

Gopha, Walk., Trans. Ent. Soc. Lond. (3) i, p. 81 (1862).
Antennæ shortly pectinate in the male on basal two-thirds, serratefasciculate in the female. Palpi extending beyond the frons; second joint long, third short. Primaries broad; the apex acute;
outer margin straight ; the inner angle rounded; vein 5 from above middle of discocellular ; 6 from end of areole ; 7 and 8 stalked Secondaries: veins 3 and 4 apart; 6 and 7 stalked.

Type of Genus. G. mixtipennis, Walk. Mixtipennis, Walk., l. c. (1862), t. xi, f. 7. Albipuncta, Schs., sp. nov.

## Gopha albipuncta, sp. nov.

Head and thorax reddish fawn-colour, shaded with brown scales ; patagiæ greyish. Abdomen greyish-brown. Primaries brown mottled with grey and green, especially in cell and at apex. A geminate wavy inner line, dark brown, nearer the base on inner margin than on costa ; a large silvery-white spot at end of cell prolonged on vein 6 ; a terminal row of greenish spots, inwardly shaded with black. Secondaries dark brown, the fringe paler.

Expanse 34 m.m.

Hab. São Paulo, S. E. Brazil.

Naduna, gen. nov.
ๆ. Antennæ simple. Palpi upturned ; third joint small. Legs smooth. Abdomen long and slender. Primaries long and narrow ; costa slightly convex; outer margin convex below apex and oblique to inner angle ; veins 3 and 4 near together ; 5 from a little below upper angle ; a long narrow accessory cell ; 6 from near its extremity ; $7,8,10$ from the end of it. Secondaries with 3 and 4 from a point ; 6 and 7 stalked.

Type. N. lignca, Schs.
Lignea, Schs., sp. nov. t. xi, f. 8.

## Naduna lignea, sp. nov.

Head and collar light reddish-brown; thorax darker brown. Abdomen dull brown above, whitish underneath. Primaries brown, the inner margin and apical half of costa darker ; the basal half of costa and median space shaded with greenish-grey ; a pale reddishbrown streak from cell to outer margin ; a median geminate brown line most distinct where crossing the cell ; a minute white point at the end of the cell surmounted by a brown line; an outer row of geminate black points; a terminal row of black points, and three rather larger subterminal black spots near costa, inner angle, and
middle of outer margin. Secondaries brown, the fringe somewhat testaceous.

Expanse $37 \mathrm{~m} . \mathrm{m}$.

Hab. São Paulo, S. E. Brazil.

## Pauluma, gen. nov.

Antennæ pectinated for two-thirds of their length, the pectinations inwardly covered with fine white hairs. Palpi upturned, third joint small. Legs hairy, especially anterior pair. Body conical hardly extending beyond secondaries. Primaries moderately broad ; the apex well rounded; the outer margin oblique; the inner angle slightly rounded : vein 5 from well above middle of discocellular; a long accessory cell ; vein 6 from near the end of it ; 7, 8,10 from end of accessory cell. Secondaries with the angles well rounded; 6 and 7 on short stalk, 8 approaching 7 about middle of cell and then widely diverging.

Type. P. nubila, Schs. Nubila, Schs., sp. nov. t. xi, f. 9.
Minna, Sch., sp. nov.
Pauluma nubila, sp. nov.

- Head and thorax greyish fawn-colour, the latter viulaceous-brown posteriorily. Abdomen brown above with a paler subdorsal tuft at the base. Primaries creamy fawn-colour ; the inner margin broadly violaceous, with a large circular brown line at the base, connected with the costa by an oblique brown shade ; apical third of costa finely violaceous; a light brown streak below this portion ; a fine terminal brown line ; some pale brown shadings from the base to the apex and outer margin ; some fine subapical dark streaks ; an oblique dark shade above the inner angle ; the fringe light grey divided by a brown line. Secondaries white; a fine terminal light brown line and some dark scales about the anal angle.
Expanse 34 m.m.


## Hab. Castro, Parana.

## Pauluma minna, sp. nov.

Head and thorax mottled fawn-colour and reddish-brown scales. Primaries light brown streaked along and below the costa with fawncolour; a dark fine terminal line, inwardly shaded with fawncolour ; some darker apical shadings, and two dark streaks between veins 4-6; a curved dark brown shade from below cell to centre of
outer margin ; traces of an outer lunular line; a darker brown shade from the base to end of cell. Secondaries white ; the outer margin finely dark brown ; the costal and inner margins brownish, the latter shading to darker brown at the angle.

Expanse $30 \mathrm{~m} . \mathrm{m}$.
Hab. São Paulo, S. E. Brazil.
Drugera, gen. nov.
Antennæ fasciculate. Palpi upturned ; second joint long ; third joint short. Fore legs very hairy ; mid and hind tibia tufted. Primaries broad ; outer margin rounded; vein 5 from above middle of discocellular ; 6 from areole ; 8-10 stalked. Secondaries: veins 3 and 4 from a point; 6 and 7 stalked.

Type. D. morona, Druce.
Morona, Druce (Edema), Biol. Centr. Amer. Lep. Het., ii, p. 4.55 , t. 90 , f. 14 (1898).

## Hardingia, gen. nov.

Antennæ with woolly pectinations on basal two-thirds. Palpi hairy ; second joint long; third joint very short. Legs hairy. Primaries : outer margin rounded, oblique ; areole from end of cell ; vein 5 from above middle of discocellular ; 6 from centre of areole; 7 and 8 stalked; 10 from end of areole. Secondaries : veins 3 and 4 close together ; 6 and 7 on short stalk.

Type of Genus. H. roberti, Schs.
Roberti, Schs., sp. nov. t. xi, f. 10.
Mechanica, Dognin. (Lirimiris), Le Nat., 1892, p. 169, Lep. de Loja., pl. 9, f. 18.

## Hardingia roberti, sp. nov.

Head and thorax greenish-ochreous, streaked with dark hairs. Abdomen brown. Primaries ochreous-buff, mottled with grey at base and below vein 2 ; a small grey blotch between veins 3 and 4 , and a larger similar spot from 4-7; a reddish-brown shade at the end of the cell ; some black scales at base below the median vein ; traces of a wavy, geminate inner and outer black line; a terminal dark line interrupted by the veins; fringe spotted with grey at veins. Secondaries brownish; a darker terminal line ; a paler transverse shade from the costa near apex to the anal angle.

Expanse 38 m.m.
Hab. Colombia.

## Eucerura, gen. nov.

Antennæ pectinated to tips. Primaries short, broad; vein 5 from middle of discocellular ; areole small ; 6 from middle of areole; $7,8,10$ from end of areole. Secondaries: veins 3 and 4 apart; 6 and 7 on short stalk; 8 close to 7 to end of cell.

Type. E. pica, Butl.
Pica, Butl. (Drymonia), Trans. Ent. Soc. Lond. (1882), p. 22.

## Salluca, gen. nov.

§. Antennæ pectinated to tips. Palpi: second joint long and hairy ; third joint short and smooth. Primaries broad ; outer margin rounded; veins 3 and 4 apart; 5 from middle of discocellular : 6 from before centre of areole ; 7, 8, 10 from end of areole. Secondaries: veins 3 and 4 apart; 6 and 7 stalked.

Type. S. moruma, Schs.
Moruma, Schs., sp. nov., t. xi, f. 11.
Podrida, Dogn. (Heterocampa), Ann. Soc. Ent. Belg., xli, p. 26 (1897).

Pistacina, Schs. sp. nov.
Gramina, Schs., sp. nov. Tarupa, Schs., sp. nov.

## Salluca moruma, sp. nov.

Head and thorax moss-green. Abdomen brown above, testaceous below. Primaries moss-green, darkest at the base, and shaded with brown on the inner margin basally ; a basal dark line and streak; the inner line geminate, dark, partly obsolete, filled in with reddishbrown; a dark line at the end of the cell, shaded with reddishbrown; the outer line dark, lunular, geminate, filled in with reddish-brown ; some dark subterminal spots shaded with brown, the largest one between veins 3 and 4 . Secondaries dark grey, with some testaceous hairs at the base and on the inner margin and traces of a geminate darker line on the costa near the apex and at the anal angle. The fringe on both wings light grey with darker spots at the veins.
Expanse 42 m.m.
Hab. Orizaba, Mexico.
Salluca gramina, sp. nov.
Head and thorax dark green. Abdomen light brown. Primaries olive-green, mottled with black, dark brown and white scales, the
dark scales forming indistinct geminate basal, inner, and outer lines ; a subterminal row of dark spots, and an interrupted terminal dark line. Secondaries blackish-brown.

Expanse $38 \mathrm{~m} . \mathrm{m}$.
Hab. Orizaba, Mexico.

## Salluca pistacina, sp. nov.

Head and thorax fawn-colour with some blackish lines on collar and patagiæ. Abdomen light brown above, creamy underneath. Primaries pale green ; a basal white line followed on costa by a large brown patch ; a violaceous brown shade below the median at end of and just beyond the cell; a fawn-colour spot in the cell partly bordered with black scales ; a fine geminate black outer line, indistinct and irregular ; an irregular subterminal row of reddishbrown spots partly bordered with black and white scales; a terminal black line; fringe reddish-brown spotted with black at veins. Secondaries smoky-brown, paler at base.

Expanse 33 m.m.

## Hab. Honduras.

## Salluca tarupa, sp. nov.

Antennæ pectinated to the tips. Head and thorax greenishbrown, mottled with darker scales. Primaries dark greenish-brown; a large space from cell to apex, white, speckled thickly with light brown scales; a dark line at the end of the cell, outwardly shaded with white, inwardly with brown; a median, transverse, geminate dark line: an outer geminate line filled in with whitish; some irregular subterminal black shades; a terminal black line; the veins blackish on the dark portion of the wing. Secondaries smokybrown, whitish at the base ; the apex whitish preceded on the costa by a greenish-brown spot bordered by two darker lines; veins terminally darker.

Expanse $33 \mathrm{~m} . \mathrm{m}$.

Hab. São Paulo, S. E. Brazil.

## Slaphita, gen. nov.

Antennæ pectinated for two-thirds of length, the pectinations densely haired. Palpi reaching vertex, hairy; the third joint minute. Fore legs with large bowl-shaped tufts of long hairs. Primaries long and narrow ; outer margin very oblique ; vein 5 from just above middle of discocellular ; 6 from centre of areole ; 7 and

8 from end of areole ; 10 from before end of areole. Secondaries broad ; costal margin convex ; outer margin rouncled ; veins 3 and 4 apart; 6 and 7 stalked.

Type. Sliaphita salona, Druce.
Salcnn, Druce (Phya), Ann. and Mag. Nat. Hist. (6) xiii, p. 356 (1894); Biol. Centr. Amer. Lep. Het., ii, t. xci, f. 13 .

## Dicentria.

Dicentria, H. S., Ausser.-Europ. Schmett., i, p. 11 (1855)).
Oligocentria, H. S., l. c., p. 11 (1855).
Janassa, Walk., Cat. Lep. Het., B. M. v, p. 1101 (18555).
Xylinodes, Pack., Proc. Ent. Soc. Phil., iii, 366 (1864).
Hatima, Walk., l. c., xxxii, p. 450 (1865).
Phya, Druce, Biol. Centr. Amer. Lep. Het., i, 242 (1857).
d. Antenuæ pectinated on basal half or two-thirls, simple in the $q$. Palpi barely extending beyond frons; second joint hairy ; third joint minute. Head slightly tufted. Primaries long and narrow ; outer margin oblique, crenulate ; vein 5 from above middle of discocellular ; 6 from middle of areole ; 7 and 8 from end of areole. Secondaries : veins 3 and 4 apart ; 6 and 7 stalked.

Type. D. contralis, H. S.
Centralis, H. S., l. c., f. 383 (1855).
Violasceus, H. S. (Oligocentria), l. c., f. 385 (185̄.5).
Lignicolor, Walk. (Janassa), 1. c., v, p. $11(11$ (185̃5)= Virgata, Pack. (Xylinodes), l. c., p. 367 (1864)= Ligingcra, Walk. (Exæreta), l. c., xxxii, p. $4 \div 3$ (1865).

Scmirufescens, Walk. (Hatima), l. c., xxxii, p. 450 (1865) $=$ Eximia, Grote (Oedemasia), Bull, U.S. Geol. Surv., vi, p. 275 (1881).
Perangulata, Hy. Edw. (Oedemasia), Papilio, ii, p. 125 (1882). Of this species I have a ô specimen labelled type but not in Mr. Edwards' handwriting. This and the preceding species seem to me to be hetter placed in Dicentria than in Schizura, which forms a more natural group when containing those species with broader and more rounded wings.
Coloradensis, Hy. Edw. (Janassa), Ent. Amer., i, p. 17 (1885).

Laciniosa, Hy. Edw. (Janassa), l. c., p. 129 (1885̆)= Phraortes, Druce (Dicentria), Ann. and Mag. Nat. Hist.
(6), iv, p. 93 (1889) ; Biol. Centr. Amer. Lep. Het., ii, p. 463 (Phya), t. xci, ff. 11, 12.

Dela, Druce (Phya), Ann. and Mag. Nat. Hist. (6), xiii, p. 355 (1894); B. C. A., ii, t. xci, f. 15.

Sabella, Druce (Nystalea), of Ann. and Mag. Nat. Hist. (6), xiii, p. 359 (1894) ; B. C. A., t. xcii, f. 2, \&. The $\widehat{\text { o }}$, fig. 6 on same plate is a true Nystalea.
Psamathe, Schs. (Phya), P. Z. S., 1892, p. 339.
Peruda, Druce (Blera), Ann. and Mag. Nat. Hist. (7), p. 78, (1901).

Linita, Schs., sp. nov.
Disparilis, Schs., sp. nov.

## Dicentria linita, sp. nov.

${ }^{1}$. Head and thorax violaceous-brown ; the patagir with hoary scales. Abdomen brown above, testaceous below. Primaries dark fawn-colour tinged with lilacine on the costa, greenish on the inner margin, and greyish on the outer margin ; somewhat mottled with olivaceous scales; a fine dark brown streak at the base, and a darker spot below it on the inner margin ; the inner line geminate, lunular, indistinct, brownish especially below the median vein ; the outer line also geminate, wavy, olivaceous ; at the end of the cell a velvety black semilunular line, with a short fine black streak extending from its centre, and partly filled in with olivaceous, beyond which is a paler space to the outer line; some dark streaks at the apex and about the inner angle. Secondaries grey, yellowish towards the base and along the inner margin ; a dark spot at the angle. i. Head and thorax grey, the latter bordered with reddishbrown posteriorly. Abdomen light brown. Primaries grey, the veins blackish speckled with white and reddish-brown ; a fine black streak at the base below the median vein, and a velvety black lunular line at the end of the cell ; lines hardly visible, forming reddish-brown shades ; a subterminal row of reddish-brown streaks between the veins, fringe reddish-brown mottled with black and white. Secondaries whitish ; the veins dark ; a dark shade at the anal angle.

Expanse of $37 \mathrm{~m} . \mathrm{m}$. ; 여 $43 \mathrm{~m} . \mathrm{m}$.
Hab. Jalapa, Mexico.

## Dicentria disparilis, sp. nov.

d. Pale fawn-colour tinged with violaceous along the costa and inner margin ; a broad brown shade from the base below the cell
and a similar shade from the cell to the outer margin between veins 4 and 5 ; a black point at the end of the cell ; the veins with dark brown streaks ; indistinct traces of geminate inner and outer lines; some dark streaks at the apex, and about the inner angle ; a terminal row of black points. Secondaries white; the tips of the veins faintly darker.

ㅇ. Pale violaceous brown, somewhat darker along the inner margin ; the costal margin tinged with greenish ; a black point at the end of the cell ; the transverse lines very wavy and indistinct, greenish ; a dark brownish spot at the base of the wings; a dark streak at the apex, and two above the inner angle, the latter outwardly shaded with white. Secondaries smoky-brown.

Expanse of $33 \mathrm{~m} . \mathrm{m}$.; ㅇ $35 \mathrm{~m} . \mathrm{m}$.
Hab. Orizaba, Mexico.

## Dicentria laciniosa, Edw. Larva.

Length $1 \frac{3}{8}$ inches. Head prominent, slightly conical, white with black markings. First segment small, then increasing to $6,7,8$, which are large, the 9 th and 10 th are smaller, and the 11th again larger. General ground-colour yellow, with numerous black streaks and spots, forming two dark dorsal bands on segments $4-9$. On seg. 4 is a long bright red subdorsal protuberance, surmounted by two hard black points; on the following four segments and also on the 11th are two dorsal shorter red protuberances, close together and likewise with hard black tips ; just beyond these on all the segments is a row of little black tubercles, and two lateral rows of the same, but very small; laterally segments 7, 8, 9 are darker. Abdominal legs and laterally above prolegs bright red. Prolegs and anal claspers black. Underneath a broad yellow band on segments 4,5 , 10, 11 and 12. Transforms underground in a rough earthen cocoon. Pupa $\frac{3-7}{4}-\frac{7}{8}$ inch in length, rather long, dark shining brown. Pupal state lasts about a month.

## Schizura.

Schizura, Doubl., Entomol., i, 59 (1841).
Edemasia, Pack., Proc. Ent. Soc. Phil. iii, 359 (1864).
Coolodasys, Pack., 1. c., iii, 363 (1864).
Differs chiefly from Dicentria in the broader wings and more rounded outer margins of primaries.

Type. S. ipoтех, Db.
Іротæ, Db., l. с., p. 60, f. 8 (1841).

Concinna, Sin. and Abb. (Phalæna), Lep. Georg. ii, t. 85 (1797) type of Oedemasia.

Unicornis, Sm. and Abb., Lep. Ins. Georg., ii, t. 96 (1797), type of Coelodasys, Pack.

Lcptinoidcs, Grote (Coelodasys), Proc. Ent. Soc. Phil., iii, p. 323 (1864).

Apicalis, Grote and Rob. (Coelodasys), Proc. Ent. Soc. Phil. vi, p. 15 (1886).
Badia, Pack. (Oedemasia), Proc., Ent. Soc. Phil., iii, p. 361 (1864).

For the synonymy of the North American species see Packard's Monograph of American Bombycine Moths, Part I. The synonomy of Walker's species is correct, except in the case of semirufescons (Hatima), which is an older name for Eximia, Grote.
Pegasis, Schs. (Cóelodasys), P. Z. S. (1892), p. 331.
Tizoc, Schs. (Etobesa), l. c., p. 339.
Tonac, Schs. (Coelodasys), l. c., p. 330.
Dcba, Druce (Hatima), Ann. and Mag. Nat. Hist. (6) xiii. p. 358 (1894); Biol. Cent. Amer. Lep. Het., ii, p. 454. (Dasylophia) t. xc, f. 10.

## Litodonta.

Litodonta, Harv., Can. Ent., viii, pp. 5, 109 (1876).
Antennæ pectinated to near tips. Palpi, short, thin, hairy, not extending beyond frons. Primaries broad, short ; vein 5 from middle of discocellular ; 6 from middle of areole ; 7, 8, 10 from end of areole. Secondaries: veins 3 and 4 apart; 6 and 7 stalked; 8 close to 7 to end of cell.

Type. L. hydromcli, Harv.
Hydromcli, Harv., l. c., p. 5 (1876).
Nigripuncta, Schs., sp. nov., t. xi, f. 12.

## Litodonta nigripuncta.

Head fawn-colour. Thorax violaceous. Abdomen brown. Primaries: base and outer margin lilacine-grey ; median space dark steel-grey, the costa somewhat paler; two velvety-black spots at base, two at apex and one at inner angle ; a round velvety-black spot in cell, preceded by a lilacine-grey shade ; the inner line forming three curves, reddish-brown, outwardly shaded with paler brown ; traces of a reddish median shade above inner margin; outer line inwardly lunular between the veins, brown, shaded with paler
brown ; the outer margin irrorated with brown, chiefly about the veins; a terminal black wavy line, partly interrupted; fringe dark grey, somewhat paler at base. Secondaries dark brown ; base of fringe blackish. Underneath brown ; an indistinct, dark outer line.
Expanse 31 m.m.

## Hab. Castro, Parana.

The palpi are slightly more developed than in L. hydromeli, Harv.

## Psilacron.

Psilacron, Feld., Reise Nov., t. 97, f. 22 (1874).
Antennæ pectinated for two-thirds of length. Palpi porrect ; third joint short. Primaries broad ; the outer margin oblique ; the areole originating well beyond the cell ; vein 5 from middle of discocellular; 6 from areole near origin ; 7, 8, 10 from end of areole. Secondaries : veins 3 and 4 apart ; 6 and 7 stalked.

Type. P. lutenvirens, Feld. Luteovirens, Feld., 1. c.

## Misogada.

Misogada, Walk., Cat. Lep. Het., B. M. xxxii, p. 449 (1865).
Antennæ pectinated to near tips which are setose. Palpi extending beyond frons in the male, shorter in the female. Primaries : veins 5 from middle of discocellular ; 6 from centre of areole ; 7, 8, 10 from end of areole. Secondaries: veins 3 and 4 close together ; 6 and 7 stalked; 8 close to 7 to near end of cell.

Type. M. cinerea, Pack.
Cincrea, Pack. (Lochmæus), Proc. Ent. Soc. Phil. iii, p. 372, $(1864)=$ Unicolor, Pack. (Lrchmæus), l. c., p. $373(1864)=$ Marina, Pack. (Lochmæus), 1. c., p. 373 (1864) = Sobria, Walk. (Misogada), l. c., p. 450 (1865).

## Notoplusia, gen. nov.

Antennæ with short hairy pectinations for two-thirds of their length. Palpi hairy, reaching vertex. Primaries : costa straight; outer margin slightly oblique: veins 3 and 4 from a point ; 5 from close to upper angle of cell ; 6 from middle of areole ; 7, 8 and 10 from end of areole. Secondaries : veins 3 and 4 from a point ; 6 and 7 stalked.

Type, N. clara, Cr.
Clara, Cr., Pap. Exot. iv, t. 311, B. (1782).

## Dognina, gen. nov.

Antenne pectinated on basal half. Palpi hairy, short, third joint very small. Legs hairy. Primaries slightly convex on costa ; outer margin rounded and oblique ; anal angle bulged out; inner margin straight ; vein 5 from well above middle of discocellular ; areole long and narrow ; vein 6 from beyond its middle; 7 and 8 from a point at end of areole; vein 10 from end of areole. Secondaries with the costal margin straight, the apex very obtuse, outer margin slightly rounded ; veins 3 and 4 from lower angle of cell ; 6 and 7 stalked.

Type. Dognina veltini, Dognin.
Veltini, Dogn. (Lirimiris), Le Naturaliste, p. 128 (1890), Lep. de Loja, pl. 5, f. 6.

## Ichthyosoma.

## Ichthyosoma, Feld., Reise Nov., t. 97, f. 17 (1874).

Antennæ pectinated on basal two-thirds. Palpi not extending beyond frons; third joint minute. Legs hairy. Primaries long and narrow ; costal margin convex on outer half ; apex very acute ; outer margin very oblique; veins 3 and 4 apart; 5 from above middle of discocellular ; 6 from middle of areole ; 7, 8, 10 from end of areole. Secondaries short and broad; costal margin convex; outer margin rounded; veins 3 and 4 from a point ; 6 and 7 from a point or on short stalk; 8 diverging from 7 at middle of cell.

Type. I. tigniferum, Feld. Tigniferum, Feld., l. c.
Cassiope, Schs., P. Z. S., 1892, p. 341 = Phronima, Druce. (Notodonta ?) Ann. and Mag. Nat. Hist. (7) i, p. 210 (1898).

## Heterocampa.

Heterocampa, Doubl., Ent., l. c., 55 (1841).
Lochmæus, Doubl., l. c., p. 57 (1841).
Tadana, Walk., Cat. Lep. Het., B. M. v, p. 990 (1855).
Cecrita, Walk., l. c., p. 992 (1855).
Luca, Walk., Trans. Ent. Soc. Lond. (3) i, p. 256 (1862).
Etobesa, Walk., Cat. Lep. Het., B. M. xxxii, p. 471 (1865).
Trichotis, Feld., Reise Nov., t. 97, f. 19 (1874).
Seirodonta, Grote, List. Lep. N. A., p. 19 (1882).
Antennæ pectinated but not to tips. Palpi short, hairy, hardly extending beyond frons. Primaries: vein 5 from above middle of discocellular ; 6 from middle of areole, which is long ; 7, 8, 10 from
end of areole. Secondaries : apex rounded ; veins 3 and 4 apart ; 6 and 7 stalked; 8 diverging from 7 at about middle of cell ; base of secondaries below not very hairy.

Type. H. astartc, Doubl.
Astartc, Doubl., Ent., i, p. 57, f. $12=$ Varia, Walk., l. c., v, p. 1023 (1855) = Menas, Hurr. (Stauropus), Ent. Corr., p. 134 (1869).
Manteo, Doubl. (Lochmæus), Ent., i, p. 58 (1841) = Cincrascens, Walk. (Tadana), l. c., v, p. 991 (1855) = Subalbicans, Grote, Proc. Ent. Soc. Phil., ii, p. 336 (1863).
Biundata, Walk., l. c., v, p. 1025 (1855) = Olivata, Pack. (Lochmæus), Proc. Ent. Soc. Phil., iii, p. 371 (1864)= Semiplaga, Walk., Can. Nat. and Geol., vi, p. 37 (1861) $=$ Viridescons, Walk. (Stauropus), Cat. Lep. Het., B. M. xxxii, p. 416 (1865). See also Packard's Monograph Boinbycine Moths.
Contracta, Walk. (Sorema), l. c., v, p. 1065 (185̌5).
Externa, Walk. (Leptina ?), l. c., xv, p. 1643 (1858); this is a $P$, and I am not sure of its position.
Subguttata, Walk., l. c., v, p. 1025 (1855).
Guttivitta, Walk. (Cecrita), l. c., v, 992 (1855) = Albiplaga, Walk. (Cecrita), l. c., vii, 1748 (1856) = Mucorea, H. S. (Drymonia), Ausser. Europ. Schmett., i, f. 514 (1856) =Indetcrminata, Walk. (Drymonia), l. c., xxxii, 413 (1865).

Varia, Walk., l. c., v, 1023 (1855) ; possibly a large + of H. obliqua, Pack.

Umbrata, Walk., l. c., v, p. 1023 (1855); the specimens in the B. M. seem quite distinct from $H$. pulverea, G. and R .

Ligneata, Walk. (Etobesa), l. c., xxxii, p. 471 (1865) = Aconthca, Druce, Biol. Centr. Amer. Lep. Het., ii, p. 458, t. 90, f. 24 (1898).

Herbida, Walk. (Luca), Trans. Ent. Soc. Lond. (3) i, p. 256 (1862).

Obliqua, Pack., Proc. Ent. Soc. Phil., iii, p. 368 (1864).
Bilincata, Pack. (Cecrita?) l. c., p. 359 (1864); (Seirodonta), Grote and Kob., List. Lep. N. A. (1882) = Turlida, Walk., Cat. Lep. Het., B. M. xxxii, 419 (1865) = Associata, Walk. (Edema), l. c., p. 426 (1865).
Pulverea, G. and R., Trans. Am. Ent. Soc., l. c., 185, t, iv, f. 32 (1867).

Cubana, Grote., Proc. Ent. Soc. Phil., v, p. 252, t. iv, f. 7 (1865).

Belfragei, Grote., Can. Ent., xi, p. 209 (1879).
Subrotata, Harv., Bull. Buf. Soc., i, p. 263, t. xi, ff. 2, 4 (1874).

Picta, Feld. (Trichotis), Reise, Nov., t. 97, f. 19 (1874) = Chapmani, Grote, Bull. U. S. Geol. and Geogr. Survey, vi, p. 2ŏ8 (1891) ; undoubtedly Felder's locality " the Amazons" is wrong; the basal lines in Picta are slightly straighter than in Chapmani, but it is not possible to differentiate the two types.
Nystalina, Feld. (Hemiceras), 1. c., t. 97, f. 12 (1874).
Surinamensis, Möschl., Verh. Zool. Bot. Ges. Wien, xxvii, p. 686, t. 10, f. 44 (1877).

Möschleri, Nom. Nov. = Herbida (preoccupied), Möschl., l. c., p. 686, t. 10, f. 4ゝ̆ (1877).

Stragula, Möschl., l. c., xxxii, p. 342, t. 18, f. 30 (1883).
Muscosa, Möschl., l. c., p. 343, t. 18, f. 31 (1883).
Cervina, Möschl., Abhandl. Senck. Ges., xiv, p. 35, f. 28 (1886).

Lunata, Hy. Edw., Papilio, iv, p. 44 (1884) = Plumosa, Hy. Edw. (Lophodonta), Ent. Amer., ii, p. 14 (1886).
Edwardsi, Druce, Biol. Centr. Amer. Lep. Het., i, p. 237 (1887) $=$ Muscosa, Hy. Edw. (preoccupied), Papilio, iv, p. 79 (1884).

Dardania, Druce, l. c., p. 237, t. xxv, f. 4 (1887).
Sylla, Druce, l. c., t. xxv, f. 5 (1887).
Manethusa, Druce, l. c., t. xxv, f. 6 (1887).
Punctata, Druce, l. c., p. $238=$ Satis, Druce, l. c., ii, p. 457 (1898).

Splendens, Druce (Rhuda), l. c., i, p. 247, t. xxv, f. 13 (1887).

Remuria, Druce (Cecrita), l. c., ii, p. 4ธ̆2, t. xc, f. ธ̌ (1898).
Eusebia, Druce, Ann. and Mag. Nat. Hist. (7) v, p. 515 (1900).

Daona, Druce, l. c. (6) xiii, p. 357 (1894); Biol. Centr. Amer. Lep. Het., ii, t. xc, f. 20.
Lloreela, Dogn. (Rhuda), Ann. Soc. Ent. Belg., xli, p. 26 (1897) = Amata, Druce, Ann. and Mag. Nat. Hist. (7) vii, p. 75 (1901).

Laeca, Schs.. P. Z. S., 1892, p. 333 ; Biol. Centr. Amer. Lep. Het., ii, t. xci, f. 2.
Hertha, Schs., l. c., 1892, p. 334.
Atrax, Schs., l. c., 1892, p. 335.
Virgea, Schs., l. c., 1892, p. 334.
Epona, Schs., l. c., 1892, p. 335.

Cloelia, Schs. (Rifargia), 1. c., 1892, p. 338.
Gelduba, Schs. (Rifargia), l. c., 1892, p. 339 ; Biol. Centr. Amer. Lep. Het., ii, t. xcii, f. 3.
Masta, Schs. (Rifargia), l. c., 1894, p. 241 ; Biol. Centr. Amer. Lep. Het., ii, t. xcii, f. 9.
Paranensis, Schs., l. c., p. 243.
Mephitis, Schs. (Lirimiris?), l. c., p. 242 ; Biol. Centr. Amer. Lep. Het., ii, t. xcii, f. 5.
Corda, Druce, Ann. and Mag. Nat. Hist. (7) vii, p. 437 (1901). Not examined.

Tuna, sp. nov.
Semilunata, sp. nov.
Aroensis, sp. nov.
Isidra, sp. nov.
Jamaicensis, sp. nov.
Vestcna, sp. nov.
Discata, sp. nov.
Rascona, sp. nov.
Divisa, sp. nov.

## Heterocampa tuna.

Fore legs and palpi blackish-brown. Head and thorax pale buff, somewhat mottled with reddish-brown. Abdomen greyish-brown. Primaries : basal half and a shade beyond cell pale buff, irrorated with brown below the cell ; a dark streak from near base of median vein to near end of cell ; outer half of wing thickly irrorated with reddish-brown ; some buff spots on costa; a black streak from within cell below subcostal vein to near apex, terminating in a black costal spot ; a blackish shade near outer margin from inner margin to vein 3 ; traces of an interrupted, geminate brown outer line ; a subterminal wavy black line; a terminal black line interrupted by the veins ; fringe reddish-brown. Secondaries dull greyish brown, the fringe mottled with pale hairs.

Expanse 35 m m.m.

## Hab. Colombia.

In this species the palpi are longer and smoother, the wings narrower than in typical Heterocampa.

Heterocampa semilunata, sp. nov.
Head and thorax grey. Abdomen light brown with a blackish subdorsal tuft at the base. Primaries light grey ; some light rufous shading at the base; a fine black streak below the median, and another on the inner margin ; the inner transverse line very fine
and indistinct; a fine brown streak at the end of the cell, and starting from its lower end a large semilunate velvety-brown mark, not extending above vein 4 ; a fine median dark grey angular line ; three outer lines, wavy, and partly confluent, forming a darker space between the costa and the semilunate mark ; a subterminal wavy white shade ; an interrupted terminal brown line. Secondaries entirely white.
Expanse $33 \mathrm{~m} . \mathrm{m}$.

Hab. Castro, Parana.

## Heterocampa aroensis, sp. nov.

Head and thorax light reddish-brown ; the patagix powdered with white in the $\wp$. Abdomen light brown with a dark dorsal tuft at the base. Primaries in the す grey shaded with yellowish on the inner and outer margins, below the median vein, and irregularly between the veins on the outer portion of the wing; the veins partly streaked with black, also fine black streaks between veins 2 and 3,4 and 5 , and 5 and 6 ; a few fine black streaks at the base of the wing ; the inner line lunular; a median wavy line interrupted towards the costa ; the outer line replaced by some irregular black scales; a greyish shade beyond the cell ; a subapical wavy grey shade. Secondaries white with the costa grey, and the inner margin clothed with grey hairs. $q$ with the primaries more silvery-grey; no distinct transverse lines; the veins only black at their extremities; the intervenal lines heavier ; the subterminal brown shade more pronounced and confluent with the streak between veins 2 and 3 ; a terminal fine brown line; the base of the fringe black. Secondaries duller white, the margins greyish-brown.

Expanse of $38 \mathrm{~m} . \mathrm{m}$. ; ㅇ $46 \mathrm{~m} . \mathrm{m}$.

## Hab. Aroa, Venezuela.

## Heterocampa isidra, sp. nov.

Head and thorax mottled black and white scales. Abdomen grey. Primaries white thinly speckled with black and orange scales; an oblique wavy dark line from costa near base to inner margin near centre ; traces of an outer, geminate, orange line from the costa to anal angle ; a faint dark median shade ; a subterminal dark shade, absent below vein 2 and between veins 3 and 4; a terminal blackish shade, and a more distinct terminal line interrupted by the veins; fringe mottled white and black; a small black crescent at end of cell. Secondaries white thickly speckled with black scales, leaving
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traces of a white median line ; a dark terminal line ; fringe as on primaries.
Expanse $¢ 45 \mathrm{~m} . \mathrm{m}$.

## Hab. Orizaba, Mexico.

Hcterocampa jamaicensis, sp. nov.
ๆ. Head and thorax light green, posteriorly with fawn-colour tufts. Abdomen brown, fawn-colour on last segment. Primaries light green; the veins streaked with black at their extremities; the lines reddish-brown, fine, geminate, indistinct, wavy ; the discal spot large, fawn-colour ; two geminate lines on costa above discal spot; the outer line followed by a fine dark shade; a wavy reddishbrown subterminal shade not extending below vein 3 ; a terminal black line, fringe reddish. Secondaries green on costa with traces of geminate, dark median and outer lines; the outer margin broadly brown; the base fawn-colour; a terminal black line; fringe as on primaries.

Expanse 50 m.m.

Hab. Jamaica, B. W. I.

## Heterocampa vestona, sp. nov.

q. Head and collar fawn-colour. Thorax greyish-green. Abdomen with some darker dorsal tufts. Primaries dark green speckled with black ; basal, and inner, geminate, transverse darker lines very indistinct; a fine line in the cell surrounded by lighter green ; the outer line most distinct, dark, lunular, with minute white specks on the veins on either side of it; a subterminal row of small brown dashes; a terminal pale green line outwardly edged with black. Secondaries greyish-brown; a terminal dark line spotted with yellow on the tips of the veins.
Expanse 45 m.m.
Hab. Orizaba, Mexico.
Allied to Viridescens, Walk., but quite distinct.
Heterocampa discata, sp. nov.
Antennæ with basal half pectinated. Head and thorax dark green. Abdomen brownish above, greyish below. Primaries dark, moss-green ; an angular inner, and outer greyish line, the former whitish on the inner margin, the latter marked by white points on the veins ; a subterminal, indistinct, blackish shade and some black scales on the tips of the veins; a large white spot at the end of the
cell, surmounted by a smaller white spot on the costal margin. Secondaries white ; yellow hairs on the inner margin ; the costal margin moss-green; a terminal brownish line. The discal spot sometimes tinged with roseate.

Expanse $37 \mathrm{~m} . \mathrm{m}$.
Hab. Castro, Parana.

## Heterocampa rascona, sp. nov.

q. Body dark grey. Primaries brownish speckled with black; a large greyish space at the base on the inner margin, and about the anal angle ; two superposed black points in the cell, surrounded by pale buff ; the basal line, fine, black ; the inner line black, geminate, irregular and indistinct ; the outer line black, lunular, followed by some white points on the veins, not extending to costa ; a subterminal darker shade ; some terminal black points between the veins ; the fringe spotted with black at the ends of the veins. Secondaries brown, the fringe slightly paler.

Expanse 42 m.m.

## Hab. Orizaba, Mexico.

## Heterocampa divisa, sp. nov.

d. Body brown, the thorax mottled with black. Primaries with a little more than the basal half dark slaty-grey, crossed by some pale shades, and outwardly by a reddish-brown median line ; a light grey patch on inner margin beyond the basal line, which is reddishbrown and indistinct ; the outer portion of the wing light brown, darker at the end of the cell ; the outer line fine darker brown, followed by some darker shades; a subterminal irregular row of distinct black spots, followed by a wavy indistinct pale line ; some small blackish spots at the ends of the veins. Secondaries whitish, the veins and margins brownish, a geminate brown spot at anal angle. Veins 3 and 4 on secondaries stalked.
Expanse 49 m.m.
IIab. Rio Janeiro.

## Malocampa, gen. nov.

Antenne of male with basal half pectinated. Palpi extending slightly beyond frons; second joint hairy ; third joint minute. Legs very hairy ; tarsi smooth. Primaries long and narrow ; apex rounded; outer margin rounded, oblique; vein 5 from above middle of discocellular ; 6 from centre of areole, which is long
and narrow, 7, 8, 10, from end of areole. Secondaries: costal margin convex; underneath thickly scaled below costa at base ; veins 3 and 4 from a point ; 6 and 7 from a point or short stalk.

Type. M. pronctata, Cr.
Punctata, Cr., Pap. Exot., iv, t. 307, f. F. (1782)= Bifurcata, Sepp. (Bombyx) Surin. Vlind., i. t. 13 (1830).

Sida, Schs. (Blera), P. Z. S., 1892, p. 333.
Bolivari, Schs. (Blera), l. c., 1894, p. 243.
Albolineata, Druce (Lirimiris); Biol. Centr. Amer. Lep. Het., i, p. 245, t. xxv, f. 10 (1887).
Argentata, Druce (Heterocampa), Ann. and Mag. Nat. Hist. (6) xv, p. 49 (1895); B. C. A., ii, t. xc, f. 18.

Danala, Druce (Dasylophia ?), Ann. and Mag. Nat. Hist. (6) xiii, p. 357 (1894); B. C. A., ii, p. 467 (Nystalea), t. xcii, f. 11.
? Amphissa, Druce (Phalera), P. Z. S., 1890, p. 509.
? Tharis, Stoll (Bombyx) Pap. Exot., iv, t. 308 D. (1782).
? Ziliante, Stoll (Bombyx) l. c., t. 384 C. (1782).
Sidoides, Schs., sp. nov.
Obscura, Schs., sp. nov.
Malocampa sidoides, sp. nov.
Body dark grey ; abdomen below whitish. Primaries grey along costal and inner margins, otherwise brownish ; the veins speckled with black and white ; a black point at the base ; a black spot at anal angle; a faint trace of a darker geminate inner line; the outer line only visible on costa and there followed by four dark points. Secondaries whitish ; the ends of veins brownish ; a terminal brown line; fringe white; some pale yellowish hairs along inner margin.

Expanse 38 m.m.
Hab. Aroa, Venezuela.

## Malocampa obscura.

Body brown. Primaries: a reddish-brown basal space, followed by a violaceous-brown space to outer line ; an oblique olivaceous shade from costa at one-third from base to middle of inner margin ; this shade is cut by an interrupted blackish line ; a large round olivaceous discal spot ; the outer line blackish, dentate, geminate, the inner portion crossing the dark space ; marginal space lighter brown, shaded with olivaceous on costa before apex, and at inner
angle ; an indistinct subterminal line. Secondaries brown ; at anal angle a pale spot edged above and below with black. Underneath brown, the inner area of secondaries yellowish.

Expanse 49 m.m.
Hab. Colombia.
Allied to M. danala, Druce.

## Magava.

Magava, Walk., Cat. Lep. Het., B. M. xxxii, p. 503 (1865).
Antennæ serrate fasciculate, the fascicles long on basal half. Palpi ascending beyond frons ; the second joint hairy, the third minute. Primaries as in Malocampa, neuration similar. Secondaries broader; long hairs on inner margin ; the base of secondaries underneath not hairy ; veins 3 and 4 apart; 6 and 7 stalked; 8 diverging from 7 just beyond centre of cell.

Type of Genus. M. multilinea, Walk. Multilinea, Walk., l. c. (1865); Biol. Centr. Amer. Lep. Het., ii, t. xc, f. 16.
Marginata, Schs., sp. nov.

## Magava marginata, sp. nov.

Palpi, head, and thorax laterally and posteriorly light grey ; thorax otherwise and collar reddish-brown. Primaries white thinly irrorated with reddish scales, the outer margin thickly irrorated ; some black specks along the inner margin ; a black, geminate, basal line oblique from costa to inner margin; a fine, median, oblique black line, geminate on costa and inner margin ; a heavy black geminate line from near costa before apex, inwardly curved to inner angle, this line confining the darker outer margin ; a fine, angular, terminal black line; the commencement of a subterminal line before apex. Secondaries white finely irrorated with reddish-brown ; a long cluster of reddish-brown hairs on inner margin.

Expanse $46 \mathrm{~m} . \mathrm{m}$.

## Hab. Rio Janeiro.

## Rhuda.

## Rhuda, Walk., Cat. Lep. Het., B. M. xi, p. 621 (1857).

Antennæ fasciculate in male on basal half, the fascicles short. Palpi extending slightly beyond frons; second joint hairy; third minute; head with diffuse tufts. Legs hairy; tarsi smooth.

Primaries : the outer margin crenulate: vein 5 well above centre of discocellular ; 6 from centre of areole ; 7, 8, 10 from end of areole, which is long and narrow. Secondaries not very hairy at base underneath ; veins 3 and 4, and 6 and 7 from a point or shortly stalked ; vein 8 close to 7 to end of cell.

Type. R. focula, Cr.
Focula, Cr. (Noctua), Pap. Exot., iv, t. 383, G. H. (1782) $=$ basifera, Walk. (Rhuda), Cat. Lep. Het. B. M. xi, p. 621 (1857).
Diffusum, Feld. (Orthosoma), Reise, Nov., t. 97, f. 18 (1874).

Endymion, Schs., P. Z. S. (1892), p. 340.
Procas, Druce (Drymonia), Ann. and Mag. Nat. Hist. (6) xiii, p. 3 丂̄8 (1894).

Gisara, gen. nov.
Antennæ fasciculate. Palpi very long, upturned ; third joint nearly so long as second, the latter hairy, the former smooth. Leys slightly hairy. Abdomen long and stout. Primaries broad ; the outer margin slightly crenulate; vein 5 from above middle of discocellular ; 6 from about middle of areole ; 7, 8, 10 from end of areole. Secondaries : veins 3 and 4 from a point ; 6 and 7 on short stalk.

Type. G. procne, Schs.
Procne, Schs. (Syminerista), P. Z. S., 1892, p. $336=$ Sambana, Druce (Nystalea), Ann. and Mag. Nat. Hist. (6) xv, p. 50 (1895); Biol. Centr. Amer. Lep. Het., ii, t. xcii, f. 13.
Ionia, Druce (Heterocampa), Ann. and Mag. Nat. Hist. (7) v, p. 515 (1900).

## Boriza, gen. nov.

Antennæ fasciculate in the ${ }^{\delta}$. Palpi short, porrect ; third joint minute, conical. A small frontal tuft. Abdomen long, stout. Wings shorter and broader than in Dicentria, H. S. Primaries : areole long; vein 6 from areole; 7, 8, 10 from end of areole. Secondaries : veins 6 and 7 stalked; 8 close to 7 to near end of cell.

Type. B. crosscea, Druce.
Crosscea, Druce (Heterocampa?), Ann. and Mag. Nat. Hist. (6) xiii, p. 357 (1894); Biol. Centr. Amer. Lep. Het. ii, t. xc, f. 21.

## Blera.

Blera, Walk., Trans. Ent. Soc. Lond. (3) i, p. 255 (1862).
Antennæ fasciculate in male, the fascicles short. Palpi extending slightly beyond frons, hairy, the third joint minute. Head tufted. Legs hairy. Primaries : the costal margin slightly convex before apex, which is acute ; the outer margin rounded, oblique; vein 5 from well above centre of discocellular ; 6 from centre of areole ; 7, 8,10 from end of areole. Secondaries : costal margin straight at base ; somewhat hairy underneath at base of vein 8 , which runs close to 7 to end of cell ; veins 3 and 4 from a point ; 6 and 7 stalked.

Type. B. politia, Cr.
Politia. Cr., Pap. Exot., iv, 309, F. (1782) = Ceruroides,
Walk. (Blera), l. c., p. 256 (1862).
Tenuis, Schs. (Harpyia ?), F. Z. S., 1892, p. 336 ; Biol. Cent. Amer. Lep. Het., ii, t. xci, ff. 16, 18.
Arecosa, Druce (Nystalea), Ann. and Mag. Nat. Hist. (7) i, p. 148 (1898) ; B. C. A., Lep. Het., ii, t. xcii, f. 8.
I have not seen this species, but judge from the figure that it belongs here.
Rogenhoferi, Nom. Nıv. = Politia (Sericochroa), Feld. Reise, Nov., t. 97, f. 21 (1874).

## Chadisra.

Chadisra, Walk., Trans. Ent. Soc. Lond. (3) i, p. 81 (1862).
Antennæ fasciculate in male. Palpi : second joint hairy in male ; third joint minute. Primaries: apex rounded ; vein 5 from above middle of discocellular ; 6 from middle of areole ; 7, 8,10 from end of areole. Secondaries: veins 6 and 7 stalked ; 8 close to 7 to near end of cell.

Type. C. bipars, Walk.
Bipars, Walk., l. c., p. 82 (1862), from Ceylon.
Perilleus, Schs. (Heterocampa), P.Z. S., 1892, p. 335.
Varona, Schs, sp. nov.
Zabena, Schs., sp. nov.
Batama, Schs., sp. nov.
Torresi, Dogn. (Xylophasia), Le Naturaliste, 1889, p. 82 ; Lep. de Loja, Pl. 6, f. 5. This is possibly the + of C.perilleus, S.Shs., and would have priority.

## Chadisra rarona, sp. nov.

Head and thorax greenish-fawn colour. Collar and patagiæ white. Abdomen brown, the last segment whitish with a dorsal black line. Primaries with the base pure white, followed by a broad dark olivegreen band, widest on costa and inner margin ; this band inwardly bordered with black and the median and submedian veins black where crossing it ; wing otherwise white thickly speckled with fawncolour scales showing an indistinct fine inner, and an outer line ; on costa before apex a triangular dark olive-green spot, two of its angles spotted with black ; fringe whitish with the base olive-green ; a fine crescent-shaped black line in the cell. Secondaries brownish-black; the fringe fawn-colour.

## Hab. Castro, Parana.

## Chadisra zabena, sp. nov.

q. Head and thorax grey, abdomen light brown with a dorsal dark tuft at base and a fine dark line dorsally on last seginent. Primaries brown slightly tinged with violaceous-grey; some white scales along inner margin ; the outer margin from angle to vein 4 white speckled with black ; a long white spot on costa before apex, containing four dark costal spots as in C. batama, this spot bordered with darker brown and followed below apex by two velvety-brown streaks; similar dark streaks at anal angle below and above the submedian vein; faint traces of darker geminate, inner, median and outer lines; a terminal lunular black line; fringe grey spotted with brown ; the fringe darkest towards apex. Secondaries dark brown, paler at base and a median indistinct pale line most visible underneath ; fringe fawn-colour; some white and black clusters of scales about anal angle. Underneath brown the costa of primaries with four white spots beyond middle.

Expanse $47 \mathrm{~m} . \mathrm{m}$.

## Hab. Orizaba, Mexico.

## Chadisra batama, sp. nov.

d. Head and thorax grey; tips of patagiæ black. Abdomen brown ; anus grey. Primaries whitish at the base and above the angle; a long white spot on the costa from above end of cell to apex, containing four black spots on extreme costal margin ; an oblique black streak at the base; cell and outer margin below apex brownish ; an inner, indistinct, geminate line; a transverse very dark median shade not reaching the inner margin and containing in cell a paler
spot ; the outer, geminate, dark line only visible between veins 4-7 ; the apical white spot posteriorly margined with black ; a terminal black line ; a black streak on basal half of inner margin ; the submedian and vein 2 tipped with black; the other veins less so. Secondaries yellowish white towards base ; brownish otherwise ; the fringe yellowish; some white and black scales at anal angle. Underneath white, the costal and outer margin broadly blackish.

Expanse 36 m.m.

## Hab. Rio Janeiro.

Veins 3 and 4 on primaries apart.

## Rincodes, gen. nov.

Neuration as in Talmenia, Möschl. Antennæ finely serrate. Palpi upturned reaching above head ; second joint long, deeply fringed ; third joint small, smooth. Abdomen with long tuft of scales.

## Type $R$. minuta, Druce.

Minuta, Druce (Crinodes), Ann. and Mag. Nat. Hist. (7) v, p. 516 (1900). This is possibly the species figured in Cramer, vol. iv, t. cccc, fig. L., as Clara; it is not the same as the Clara figured on t. cccxi, and which is quoted under Notoplusia.

## Talmenia.

Talmenia, Möschl., Verh. Zool.-bot. Ges. Wien, xxxii, p. 345 (1883).
Antennæ fasciculate, the fascicles short. Palpi porrect, slight, thinly haired ; third joint minute. Primaries : the outer margin oblicque, rounded between veins 3 and 4 ; vein 5 from middle of discocellular ; 6 from centre of areole ; 7 and 8 from end of areole; 10 from before its end. Secondaries : costal margin convex on basal half; apex somewhat acute ; veins 3 and 4 from a point; 6 and 7 stalked ; 8 close to 7 to near end of cell.

Type. T. arsilonchoides, Möschl. Arsilonchoides, Möschl., l. c., p. 346, t. 18, f. 34 (1883).

## Ophitis.

Ophitis, Feld., Reise Nov., t, 97, f. 10 (1874).
Antennæ fasciculate. Palpi extending slightly beyond frons; second joint long, third very short. Primaries: outer margin rounded, slightly oblique, crenulate ; inner angle hardly rounded ;
vein 5 from above middle of discocellular ; 6 from middle of areole ; $7,8,10$ from end of areole ; 3 and 4 apart. Secondaries: vein 8 close to 7 to end of cell ; 3 and 4 slightly apart; 6 and 7 on short stalk.

Type. Ophitis magnaria, Feld.
Magnaria, Feld., l. c.

## Meragisa, gen. nov.

Antennæ fasciculate, the fascicles short. Palpi extending beyond frons, ascending; the second joint hairy ; the third joint minute. Legs hairy. Head without tuft. Primaries : costal margin slightly convex ; outer margin broad; convex ; the inner angle somewhat rounded; vein 5 from above middle of discocellular ; 6 from middle of areole ; 7, 8,10 from end of areole. Secondaries rather long ; the base of costa convex ; apex, outer margin and anal angle rounded; veins 6 and 7 stalked ; 8 close to 7 to end of cell.

Type. M. valdiviesoi, Dogn.
Valdiviesoi, Dogn. (Orthosoma), Le Naturaliste, 1890, p. 193 ; Lep. de Loja, pl. 5., f. 8.

Limosa, Schs. (Heterocampa), P. Z. S., 1892, p. 344.
Marcata, Dogn. (Symmerista), Le Naturaliste, 1889, p. 82 ; Lep. de Loja, pl. 5, f. 10.
Pallida, Schs., sp. nov.
Politioides, Schs., sp. nov. Sidata, Schs., sp. nov.

## Meragisa pallida, sp. nov.

Head and thorax whitish-grey; abdomen darker. Primaries white thinly speckled with black scales; an oblique black line from costa to middle of inner margin, geminate on costa and on inner margin ; an outer wavy, geminate, black line from costa near apex to inner angle ; a terminal irregular black line and some black scales on either side of the tips of veins. Secondaries greyish, paler towards the inner margin and a faint trace of an outer line especially towards the anal angle.

Expanse $45 \mathrm{~m} . \mathrm{m}$.

## Hab. Castro, Parana.

## Meragisa politioides, sp. nov.

Head and thorax grey. Abdomen darker above tinged with yellow towards base; underneath yellow. Primaries light grey speckled
with brown and black scales; a basal, an oblique inner, and an irregular outer, geminate line, the lines black filled in with yellow scales ; a terminal irregular black line inwardly shaded with yellow, and some yellow scales on the tips of the veins. Secondaries blackish; yellow at the base. Underneath the primaries are blackish; the apex outer and inner margins yellowish ; the secondaries yellowish-grey with a broad subterminal black band.

Expanse $44 \mathrm{~m} . \mathrm{m}$.

## Hab. Rio Janeiro and Coatepec, Mexico.

This is the species referred to in the Biologia as $S$. politia, Cr.

## Meragisa sidata.

Body grey. Primaries thickly irrorated with grey and buff scales, darker than $E$. politioides, Schs. ; a dark grey inner line, geminate, outwardly oblique from costa to median vein; a minute discal streak, above which is an oblique costal streak; outer line fine, dark, dentate, geminate on costa, suffusing below vein 3 with the subterminal which consists of geminate black lunules separated by greenish-buff ; these lunules are oblique from costa before apex to vein 4 , and below vein 4 they are closer to the outer margin ; some terminal outwardly curved black lunules, preceded by black marks below each vein; fringe yellow. Secondaries dull brown; fringe yellow. Underneath dull brown ; a terminal dark line on primaries.

Expanse 49 m.m.

## Hab. Merida, Venezuela.

## Phastia.

## Phastia, Walk., Trans. Ent. Soc. Lond.(3) i, p. 258 (1862).

Antennæ fasciculate. Palpi slender, porrect, slightly hairy; third joint one-third the length of second. Primaries : costa convex ; outer margin and inner angle rounded, only slightly oblique; vein 5 from above middle of discocellular ; 6 from middle of arenle; $7,8,10$ from end of areole. Secondaries long, not very broad ; the costal margin straight ; veins 6 and 7 stalked ; 8 close to 7 to end of cell.

> Type. Phastia basalis, Walk.

Basalis, Walk., l. c. (1862).
Alcimede, Druce (Oedemasia ?), P. Z. S., 1890, p. 510 ; Biol. Centr. Amer. Lep. Het., ii, t. xc, f. 2.
Duronia. Druce (Oedemasia), l. c., p. 453, t. xc, f. 3 (1898).

## Euxoga.

Euxoga, Möschl., Verh. Zool.-bot. Ges. Wien, xxvii, p. 692 (1878).

Antennæ fasciculate. Palpi extending beyond frons, thickly haired, smooth; the third joint more than half as long as second. Primaries broad; costal margin straight; apex not acute; outer margin concave to vein 3 , then oblique ; the inner angle oblique; vein 5 from above middle of discocellular ; 6 from middle of areole ; $7,8,10$ from end of areole. Secondaries: veins 3 and 4 from a point; 6 and 7 on short stalk; 8 diverging from 7 at middle of cell.

Type. E. argentco punctata, Möschl. Argentco punctata, Mösch., l. c., t. x, f. 50 (1878).

## Goaxis, gen. nov.

Antennæ fasciculate. Palpi extending beyond frons ; second joint long, third short. Legs smooth. Primaries broad; outer margin crenulate, excavated between veins $3-6$, oblique below vein 3 ; vein 5 from above middle of discocellular; 6 from centre of areole; $7,8,10$ from end of areole. Secondaries: veins 3 and 4 from a point; 6 and 7 stalked; 8 diverging from 7 at middle of cell.

Type. G. singularis, Schs., sp. nov., t. xi, f. 13.

## Goaxis singuluris.

Head and thorax greyish. Abdomen brown. Primaries brown; a buff space from inner margin near base, obliquely to almost the middle of costal margin ; this space outwardly shaded with reddishbrown, irrorated with darker scales, and followed from inner margin to subcostal vein by a blackish brown space crossed by a pale antemedial line, which does not extend into the cell ; the discocellular broadly brown edged on either side by a whitish line ; beyond the cell a dark angular line, followed by a geminate lunular brown line, filled in with buff ;-veins black towards apex; an apical buff shade; a subterminal black shade from just below apex to vein 3; a marginal row of small reddish-brown spots between the veins. Secondaries dark brown ; fringe terminally white.

Expanse 30 m.m.

## Hab. Petropolis, Brazil.

## Maschane.

Maschane, Walk., Cat. Lep. Het., B. M. xxvii, p. 2 (1863).
Antennæ fasciculate. Primaries: costal margin very convex to beyond middle ; apex acute ; outer margin rounded, very oblique ; vein 5 from near upper angle of cell ; 6 from middle of areole ; 7 and 8 from a point; 10 from before end of areole. Secondaries: veins 3 and 4 apart; 6 and 7 stalked.

Type. M.erratipennis, Walk.
Erratipennis, Walk., l. c., p. 3. Simplex, Walk. (M.), l. c., p. 3.

## Rifargia.

Rifargia, Walk., Trans. Ent. Soc. Lond. (3) i, p. 258 (1862).

Antennæ fasciculate. Palpi extending slightly beyond frons; second joint hairy, third minute. Legs hairy. Abdomen long, stout. Primaries : apex rounded ; outer margin rounded, oblique ; inner margin straight ; vein 5 from just above middle of discocellular ; 6 from middle of areole ; 7, 8, 10 from end of areole. Secondaries: veins 3 and 4 apart; 6 and 7 on short stalk; 8 diverging from 7 at middle of cell ; base of wing underneath hairy.

Type. R. xylinoides, Walk.
Xylinoides, Walk., l. c., p. 259 (1862).
Moha, Dogn., Ann. Soc. Ent. Belg., xli, p. 27 (1897).
Causia, Schs. (Blera), P. Z. S., 1892, p. 332.
Bianca, Sch. (Blera), l. c., p. 333.
Apella, Schs. (Blera), l. c., p. 333.
Myconos, Schs. (Symmerista), l. c., p. 336.
Tethys, Sch. (Symmerista), 1. c., p. 336.
Distinguenda, Walk. (Acronycta), Cat. Lep. Het., B. M. ix, p. 63 (1856) = Dıbía, Möschl. (Symmerista), Verh. Zool.-bot. Ges. Wien, xxvii, p. 689 (1877).
Mus, Möschl. (Symmerista), 1. c., p, 689, t. x, f. 47 (1877).
? Brunnea, Möschl. (Symmerista), l. c., p. 690, t. x, f. 48 (1877).

Lineata, Druce (Symmerista), Biol. Centr. Amer. Lep. Het., i, p. 240, t. xxv, f. 11 (1887).
Bichorda, Hamps. (Heterocampa), Ann. and Mag. Nat. Hist. (7) vol. vii, p. 251 (1901).
Felderi, Schs., sp. nov.

Collema, Schs., sp. nov. Grisea, Schs., sp. nov.
Cassandra, Schs., sp. nov.
Nubila, Druce, Ann. and Mag. Nat. Hist. (7) vii, p. 437 (1901).

Rifargia felderi, sp. nov.
Head and thorax white with a few black scales; a transverse black line on collar, and a longitudinal black line on patagix. Primaries white with a few scattered black scales ; a fine geminate black inner line, inwardly oblique from costal to subcostal, then outwardly curving to submedian with another short curve below it; this line joined on subcostal by a geminate line from the base ; at end of cell geminate lines connected on median by a black line and also on subcostal by two oblique lines from costa; the outer line wavy, geminate, followed on inner margin by a black spot ; terminal line fine indistinct, lunular towards anal angle ; between vein 4 and apex some subterminal brownish shadings. Secondaries white ; a small dark spot at anal angle.

Expanse $38 \mathrm{~m} . \mathrm{m}$.

## Hab. Peru.

## Rifargia collema.

Head and collar grey mottled with brown. Thoras brown ; the patagiæ grey mottled with white. Abdomen brown. Primaries white irrorated with grey, and shaded with brown below the median vein ; a genninate basal costal streak; an antemedial, geminate, wavy, dark brown line, filled in with lighter brown; a whitish lunular discal spot; two median dark streaks on costa; an outer geminate, wavy line, the inner part black, the outer part brown, less heavily marked ; the outer line followed below costa by two velvetyblack spots, and by three less conspicuous spots below and above vein 2, and between veins 3 and 4 ; a subterninal black line, nearly straight from costa to vein 3 , then forming three curves to inner angle ; terminal dark shades at veins ; fringe grey. Secondaries whitish ; the outer margin broadly black ; some terminal white shades between the veins; fringe white.

Expanse 39 m.m.

## Hab. Colombia.

## Rifargia grisea.

Head and collar brown. Thorax grey. Abdomen buff at base, then brown ; the last two segments dorsally white irrorated with
brown scales. Primaries silvery-grey ; the costa shaded and spotted with brown ; a small black mark at the base ; an inner dark brown, geminate, line ; a broad outer transverse brown band, preceded by velvety-black spots above and below vein 2 , and also between veins 4 and 5 , and 5 and 6 ; a terminal brown line preceded by an interrupted blackish line ; fringe white spotted with brown. Secondaries: the inner area whitish, the veins dark; a broad marginal dark grey shade narrowing at anal angle ; the extreme margin mottled with white between the veins ; fringe white. In the females the secondaries are darker ; the inner area somewhat tinged with buff. Underneath the female is black ; the costa near apex spotted with white ; on the secondaries a whitish shade from middle of costa to anal angle.

Expanse of $40 \mathrm{~m} . \mathrm{m}$. ; ㅇ $43 \mathrm{~m} . \mathrm{m}$.

## Hab. Colombia.

## Rifargia cassandra.

Body dark grey, the collar shaded with reddish-brown. Primaries white irrorated with grey and pale brown ; veins 2-10 with interrupted black streaks ; traces of a basal, and a geminate inner, transverse grey line ; a large reddish-brown spot at end of cell, containing a darker line, and preceded and followed by a dark streak which reaches costa; a subterminal whitish shade, outwardly shaded with reddish-brown above vein 4 ; a dark lunate terminal line; fringe greyish, spotted with dark brown at ends of veins. Secondaries white ; a terminal dark grey line ; some dark hairs on inner margin ; fringe white.

Expanse 44 m.m.
Hab. Merida, Venezuela.

> Afilia, gen. nov.
of Antennæ finely pectinated; in the $q$ simple. Palpi minute. Primaries long and narrow, the inner angle rounded ; no accessory cell ; veins 3 and 4 from lower angle of cell, 6-10 stalked. Secondaries : veins 3 and 4 from lower angle of cell; 6 and 7 from a point ; 8 diverging from cell at a third from base; the costal margin straight.

Type. A. cinerea, Schs.
Cinerea, Schs., sp. nov. $=$ Cerura cinerea, Druce (Nec. Walk.), Biol. Centr. Amer. Lep. Het., i, p. 241 (quoted). T. xii, f. i.

## Afilia cinerea, sp. nov.

Head and thorax grey, abdomen reddish-brown. Primaries grey, finely speckled with black; a fine black basal line angled at subcostal vein ; a median wavy black line not reaching the submedian ; a lunular black line at the end of the cell ; an outer, indistinct, reddish shade followed by some irregular blackish shades ; a distinct wavy subterminal black line ; a terminal black line ; fringe reddishbrown. Secondaries sordid white in the $\delta$, greyish-brown in the $q$, with the base whitish.
Expanse of $33 \mathrm{~m} . \mathrm{m}$. ; ㅇ $40 \mathrm{~m} . \mathrm{m}$.

## Hab. Orizaba, Guadalajara, Mexico.

The markings in the $\circ$ are more distinct than in the d, and a female from Las Vigas on the Cofre de Perote has the space from basal to median lines filled in with reddish brown.

## Lobeza.

Lobeza, H. S., Ausser.-Europ. Schmett., i, p. 11 (1854).
Dukinfieldia, Schs., P. Z. S., 1894, p. 234.
Antennæ shortly pectinated to tips. Palpi, short hairy, upturned, not extending beyond frons. Legs hairy. Abdomen long, stout, tufted laterally. Primaries convex before apex; outer margin rounded, oblique; vein 5 from centre of areole; 6 from upper angle of cell ; 7-10 stalked; 10 from beyond 7. Secondaries: veins 3 and 4 close together; 6 and 7 from a point or shortly stalked; 8 connected to 7 at middle of cell by a bar.

Type. L. aglone, H. S.
Aglone, H. S., l. c., f. 85 (1854). •
Lateralis, Walk. (Cossus), Cat. Lep. Het., B. M. vii, p. 520 (1856).

Favilla, Dogn., Le Naturaliste, p. 33, 1892 ; Lep. de Loja, pl. 9, f. 10.
Suprema, Schs. (Dukinfieldia), P. Z. S., 1894, p. 234.
Dentilinea, Schs., sp. nov.

## Lobeza dentilinea, sp. nov.

Head and thorax above grey. Abdomen above blackish-grey, underneath with deep yellow transverse lines and lateral yellow tufts. Thorax below yellow centrally, laterally black. Primaries grey; an inner oblique line slightly dentate on costa, then wavy, nearer the base on the costa than on the inner margin ; an outer very
dentate transverse line; both lines and a transverse line at the end of the cell reddish-brown. Secondaries blackish-grey, paler along the outer margin; fringe light grey. Underneath the wings are blackish-grey.
Expanse $66 \mathrm{~m} . \mathrm{m}$.

## Hab. São Paulo, S.E. Brazil.

## Lobeza dukinfieldia. Larva.

Length $70 \mathrm{~m} . \mathrm{m}$. Head black. Second segment somewhat contracted ; a black transverse band, divided subdorsally. Body yellow. Third and fourth segments with transverse red bands centrally, a narrower red band posteriorly, and a red line anteriorly interrupted laterally. From segment five a subdorsal red line ; broad red transverse bands between the segments; centrally on each segment are irregular red bands, contracted laterally, and widening on dorsum where it is connected to subdorsal line by a short red streak. Underneath red, the prolegs and abdominal legs tipped with black ; geminate yellow streaks anteriorly on segments 7-11. Described from a specimen in spirits.

## Lusura.

Lusura, Walk., Cat. Lep. Het., B. M. v, p. 1067 (1855). Tifuma, Walk., l. c., p. 1077 (1855).

Antennæ pectinated to tips. Palpi long, especially the sscond joint. Areole absent. Primaries: apex rounded; outer margin rounded, oblique ; vein 5 from middle of discocellular ; 6 from upper angle of cell ; $7-10$ stalked; vein 10 from beyond 7. Secondaries : veins 3 and 4 apart; 6 and 7 stalked.

Type. L. discalis, Walk.
Discalis, Walk., l. c., p. 1067.
Chera, Stoll. (Noctua), Pap. Exot., iv, t. 308, E. (1782) = Megalops, Sepp. (Bombyx), Surin. Vlind., i, t. 24 $(1848)=$ Simois, Walk. (Tifama), l. c., p. 1078, n. 1 (1855).

Altrix, Stoll. (Bombyx), l. c., t. 307, E. (1782); Felder, Reise Nov., t. 98, f. 6.

## Gluphisia.

Ghuphisia, Boisd., Ind. Meth., 53 (1829).
Male antenna pectinated to tips ; female simple. Palpi short, hairy. Primaries : vein 5 from middle of discocellular; 6 from
trans. ent. soc. Lond. 1901.-PART III. (SEpt.) 22
upper angle of cell ; 7-10 stalked, 10 from beyond 7 . Secondaries : veins 3 and 4 well apart ; 6 and 7 stalked; 8 close to 7 to end of cell.

Type of genus. G. crenata, Esper., from Europe.
Crenata, Esper. (Bombyx), Schmett., iii, p. 245, t. 47, ff. 3, 4 (1785).
Lintneri, Grote, Can. Ent., ix, p. 8 (1877).
Severa, Edw., Ent. Amer., ii, p. 167 (1886).
Septentrionis, Walk., Cat. Lep. Het., B. M. v, p. 1038 (18555).

Wrightiv, H. Edw., Ent. Amer., ii, p. 11 (1886).
For synonymy of American species see Packard's Monograph of American Bombycine Moths.

## Nagidusa.

Nagidusa, Walk., Trans. Ent. Soc. Lond. (3) i, p. 257 (1862).
f. Antennæ simple. Head with slight tuft. Primaries long, narrow ; apex acute; outer margin oblique, slightly rounded; no accessory cell; vein 5 from above middle of discocellular ; 6-10 stalked; 10 from before 7. Secondaries : veins 3 and 4 apart; 6 and 7 stalked ; 8 close to 7 to near end of cell.

Type of genus. $N$. xylocampoides, Walk. Xylocampoides, Walk., l. c. (1862). T. xii, f. 2.
Exyra, Druce (Heterocampa), Ann. and Mag. Nat. Hist. (7), vii, p. 76 (1901).

Cinescens, Schs., sp. nov.
Nagidusa cinescens.
Head and thorax grey. Abdomen brownish-grey. Primaries grey; a dark line from base of median vein to submedian vein at antemedial line, which is wavy, geminate, black ; the postmedial geminate, very indistinct ; a dark discucellular line; the subterminal consisting of an indistinct shade, angular below vein 2, and replaced towards costa by blackish streaks on and between the veins ; some dark spots on costa beyond middle ; a terminal dark grey line ; fringe grey spotted with black at veins. Secondaries smoky-grey; an outer whitish line; a terminal dark grey line; fringe whitish spotted with grey.

Expanse 47 m.m.
Hab. Orizaba, Mexico.

## Ellida.

Ellida, Grote, Can. Ent. viii, p. 125 (1876).
Antennæ pectinated to tips. Palpi short, hardly extending beyond frons. Wings long and narrow. Primaries: vein 5 from middle of discocellular ; 6-10 stalked, 10 from before 7. Secondaries : veins 3 and 4 from a point ; 6 and 7 stalked ; 8 close to 7 to end of cell.

Type of Genus. E. caniplaga, Walk.
Caniplaga, Walk. (Cymatophora), Cat. Lep. Het., B. M. ix, p. $18(1856)=$ transversata, Walk. (Edema), l. c., xxxii, p. $427(1865)=G e l i d a$, Grote, l. c., p. 126 (1876).

## Macrurocampa.

Macrurocampa, Dyar., Ent. News., iv, p. 34 (1893).
Antennæ pectinated, but not to tips. Palpi porrect, hairy, extending slightly beyond frons. Legs hairy. Primaries : vein 5 from about middle of discocellular ; 6-10 stalked, 10 from before 7. Secondaries: veins 3 and 4 from a point; 6 and 7 stalked ; 8 diverging from 7 a little before end of cell.

Type of Genus. M. marthesia, Cr.
Marthesia, Cr. (Noctua), Pap. Exot., iii, pl. 264, f. B. (1779) $=$ tesella, Pack. (Lochmæus), Proc. Ent. Soc. Phil., iii. p. $370(1864)=$ Turbida, Walk. (Cerura), Cat. Lep. Het., B. M. xxxii, p. $407(1865)=$ Elongata, Grote and Rob. (Heterocampa), Trans. Ent. Soc. Phil., i, p. 184 (1867).
Amazonica, Butl. (Symmerista), Ann. Nat. Hist. (5) ii, p. 171 (1878).

## Harpyia.

Harpyia, Ochs., Schmett., Eur., iii, 19 (1810).
Antennæ pectinated to tips. Primaries: vein 5 from middle of discocellular ; 6 from upper angle or stalked close to it ; veins 7-10 stalked, 10 from before 7. Secondaries : veins 3 and 4 from a point; 6 and 7 on long stalk.

Type of Genus. H. bicuspis, Borkh., from Europe. Bicuspis, Borkh. (Bombyx), Eur. Schmett., iii, p. 380 (1790). Borealis, Boisd. (Dicranoura), Guér., Icon. R. Anim., t. ४8, f. 5 (1829).

Scolopendrina, Bdv., Lep. de la Cal., p. 86 (1869).

Cinerea, Walk. (Cerura), Cat. Lep. Het., B. M. xxxii, p. 407 (1865). For complete synonymy see Packard's Monograph of American Bombycine Moths.

> Notela, gen. nov,

Palpi short. of Antennæ pectinated; in the $q$ simple. A high frontal tuft in the $q$. Primaries with costal margin convex towards apex; outer margin oblique, somewhat rounded in the $f$; no accessory cell. Veins 3 and 4 well apart, 6 from upper angle of cell; $7-10$ stalked, 10 from lower on stalk than 7. Secondaries with veins 3 and 4 from a point; 6 and 7 on short stalk; 8 close to 7 to near end of cell.

Type. N. jaliscana, Schs.
Jaliscana, Schs., sp. nov. t. xii, f. 3.
Notela jaliscana, sp. nov.
Head and thorax dark grey. Abdomen light brown above, greyish below. Primaries grey speckled with black, especially on the veins; longitudinal and transverse brownish shadings, very indistinct, the most noticeable being the two outer lines; fine subapical black lines. In some specimens a black line from the base below the median vein, first straight, then slightly wavy at vein 2 and not quite reaching the middle of the outer margin ; below the line a black spot between veins 2 and 3 . Secondaries whitish, the veins and outer margin smoky, fringe white.

Expanse of $32 \mathrm{~m} . \mathrm{m}$. ; ㅇ $36 \mathrm{~m} . \mathrm{m}$.

## Hub. Guadalajara, Mexico.

## Euharpyia, gen. nov.

đ Antennæ pectinated on basal half; at base of antennæ a long, porrect, tuft of hairs. Palpi porrect ; second joint long. Primaries : veins $6-10$ stalked ; 10 from before 7 . Secondaries: veins 3 and 4 from a point ; 6 and 7 on short stalk.

Type. Euharpyia comita, Schs.
Comita, Schs., sp. nov. t. xii, f. 4.

## Euharpyia comita, sp. nov.

Frons buff mottled with brown hairs. Collar dark brown. Abdomen brown above, buff below. Primaries: the basal and outer
thirds bruwn ; the median space greyish ; some dark streaks at the base, and an indistinct inner shade ; a fine, brown, geminate median line, forming three curves from costa to inner margin ; a greyish spot in the cell ; the outer line broad, paler grey especially on the veins, bordered on either side with dark grey, crossed by a fine black line, interrupted by the veins, and with a row of black points on the veins; beyond the outer line there is a row of black points on the veins, beyond which they are streaked with black; three black spots before the subterminal line, below vein 2 , between 4 and 5 , and between 7 and 8 ; the subterminal line is reddish-brown, followed by a black spot at angle, and four similar spots between vein 4 and the apex ; fringe light-brown spotted with black between the veins. Secondaries brown, paler at the base.
Expanse 38 m.m.

## Hab. Chanchamayo, Peru.

## Eunotela, gen. nov.

đ. Antennæ with basal half pectinated. Palpi upturned extending beyond frons; second joint long. Legs hairy. Primaries: vein 5 from middle of discocellular ; 6 from upper angle of cell ; 7-10 stalked, 10 from before 7. Secondaries : veins 3 and 4 apart ; 6 and 7 stalked.

Type. Eunotela pallida, Schs.
Pallida, Schs. sp. nov. t. xii, f. 5. Tropica, Schs. (Edemasia), P. Z. S., 1894, p. 241. Collaris, Schs., sp. nov.

## Eunotela pallida, sp. nov.

Palpi dark brown. Head and collar fawn-colour, the latter posteriorly margined with dark brown. Thorax and abdomen grey. Primaries pale brownish-grey, the median space whitish. Sone blackish specks at the base and an interrupted basal black transverse line ; an inner transverse irregular black line, preceded by a linear brown shade ; a velvety-black line on discocellular, followed by a fine black transverse linear shade. An outer row of black points followed by a smoky transverse shade ; a subterminal very distinct velvety-black line, preceded towards apex by some brownish shades ; a terminal dark.grey line. Secondaries white; a few black scales at anal angle.

Expanse $40 \mathrm{~m} . \mathrm{m}$.
hab. Castro, Parana.

## Eunotela collaris.

Palpi brown. Frons fawn-colour ; vertex and collar dark velvetybrown. Thorax grey. Abdomen brownish-grey. Primaries brown mottled with fawn-colour at base, in cell and on outer space; some white and black scales at base of inner margin, and a whitish streak mottled with black below the median vein; a white discal spot edged above with black, below with brown, and preceded by a whitish space ; a large brown spot on costa at one-third from base, followed by a geminate brown transverse line; veins $2,3,4$ and 6 partly irrorated with white and black scales; an outer white punctiform line; marginal black spots between the veins, edyed with grey. Secondaries greyish-brown, palest at base ; an indistinct pale outer line ; fringe whitish towards anal angle.

Expanse 39 m.m.

Hab. Colombia.

## Eunystalea.

Eunystalea, Grote, Abh. Naturw. Vereins zu Bremen, xiv, 7 (1895).
"Vein 5 from near middle of cross-vein, 6-9 stalked, 10 from the cell, no accessory cell ; on secondaries veins 3 and 4 from the lower angle of the cell, 6 and 7 short stalked,"-fide Dyar. Traus. An. Ent. Soc., xxiv. (1897). From the description, the Genus is distinct from anything described.

Type. E. indiana, Grote.
Indiana, Grote (Nystalea), Pap. iv, p. 7 (188ヶ).

## Pontala.

Pontala, Walk., Cat. Lep. Het., B. M. xxx, p. 954 (1864).

Platyodonta, Feld., nec Möschl.
Primaries straight from apex 10 vein 5 , then angled and very oblique to inner margin, which is excavated and deeply toothed ; vein 5 from upper angle of cell; 6, 7, 10 from end of areole; 8 stalked with 7 . Secondaries : veins 3 and 4 from a point ; 6 and 7 stalked.

Type. P. rubrana, Walk.
Rubrana, Walk., l. c. (1864).
Calpe, Feld. (Platyodonta), Reise Nov. t. xcvii, f. 16 (1875).

## Apela.

Apela, Walk., Cat. Lep. Het., B. M. v, p. 1092 (18555). Platyodonta, Möschl. (nec Felder), Verh. Zool.-bot., Ges. Wien, xxvii, p. 682 (1878).
Male. Antennæ fasciculate on basal half. Palpi: third joint short. Primaries broad ; costal margin convex on basal half ; inner margin excised, and deeply lobed-vein 5 from upper angle of cell ; 7 and 8 stalked. Secondaries : veins 3 and 4 from a point ; 6 and 7 stalked.

Type. A. divisa, Walk.
Divisa, Walk., l. c., p. 1093 (1855) = Strigata, Möschl. (Platyodonta ?), l. c., p. 683, t. x, f. 41.
This species was erroneously described as from India.

## Dylomia.

## Dylomia, Feld., Reise, Nov., t. 97, f. 13 (1874).

Antennæ fasciculate, palpi not extending beyond frons, small, upturned. Primaries: apex not acute; outer margin and inner angle obliquely rounded; vein 5 from close to upper angle of cell ; 6 from middle of areole; 7-10 from end of areole. Secondaries: veins 3 and 4 apart (from a point in Ciliata, Feld.) ; 6 and 7 stalked; 8 diverging from 7 at middle of cell.

Type. D. tortricina, Felder.
T'ortricina, Feld., Reise, Nov., t. 97, f. 13. Cresia, Feld., l. c., t. 97, f. 14. Ciliata, Feld., 1. c., t. 97, f. 15. Diagonalis, Feld., I. c., t. 98, f. 5.

## Naprepa.

Naprepa, Walk., Cat. Lep. Het., B. M. v, p. 1046 (18555).
Antenne fasciculate. Palpi upturned, extending beyond frons ; second joint long, with thick short hairs; third joint minute. High thoracic crest. Primaries : outer margin crenulate ; on inner margin a tufted lobe; vein 5 from about middle of discocellular ; 6 from areole, near cell ; 7 and 8 stalked; 10 from end of areole. Secondaries: veins 3 and 4 from a point; 6 and 7 stalked; 8 diverging from 7 before end of cell.

Type. N. camclinerdes, Walk.
Camelinerdes, Walk., l. c. (1855).

Cyllota, Druce (Ophitis), Biol. Centr. Amer. Lep. Het., i, p. 247, t. xxv, f. 14 (1887), (Naprepa), l. c., ii, p. 466. Pulcheria, Druce (Ophitis), Ann. and Mag. Nat. Hist. (6) xvi, p. 38 (1895) ; B. C. A., ii, p. 466 (Naprepa), t. xcii, f. 10 .

Elongata, Schs., sp. nov.

> Naprepa elongata, sp. nov.

The wings proportionately longer and narrower than in Naprepa cylotta, Druce, and more of a reddish-brown ; the markings otherwise very similar but without the outer row of light points on the veins, and the tuft on inner margin darker. Secondaries with the anal markings more pronounced and pale points at tips of veins. The secondaries are whitish underneath withcut any transverse line, and there is a cluster of dark scales at anal angle.

Expanse 93 m.m.

Hab. Rio Janeiro.

## Naprepa cyllota, Druce. Larva.

Length $60 \mathrm{~m} . \mathrm{m}$. Head and first segment very small : second segment larger ; third and fourth much enlarged. Head and first segment pale bluish-green ; laterally on first segment two small white spots circled with black; seg. 2 with 4 similar spots. Segments $3-13$ bright green ; posteriorly on segment 4 a semicircular black line edged behind with white, segments 5 and 10 with two, the other segments with three white spots circled with red placed rather outwardly; below these spots is a lateral wavy white line edged above and below with black, beginning at the 5th and ending at 11 th segment; below this line are four white spots on each segment; segments 2,3 and 4 have also four lateral spots and above prolegs on segments 1, 2, and 3 are two other small spots. Laterally below white line, underneath, and abdominal legs bluish-green. Prolegs white with three black specks externally ; segment 11 is laterally bordered with maroon, and the stigma is placed in a round black spot circled with yellow. Segments 12 and 13 dorsally maroon, underneath bright green.

## Lophopteryx.

Lophopteryx, Steph., Ill. Brit. Ent. Haust., ii, p. 26 (1829).
Palpì porrect. Antennæ serrate and fasciculate. Primaries: outer margin crenulate ; vein 6 from areole near cell ; 8 and 10 stalked.

Secondaries: veins 6 and 7 stalked ; 8 close to 7 to near end of cell. Thoracic crest.

Type. L. capucina, Linn.
Capucina, Linn., Syst. Nat., i, p. 507 (17588).
Americana, Harv. Can. Ent., ix, p. 95 (1877).
Herbertina, gen. nov.
Antennæ with minute fascicles. Head with small tuft. Primaries broad; a tuft of hairs on inner margin ; areole small ; vein 6 from areole ; 8 - 10 stalked. Secondaries : veins 3 and 4 apart; 6 and 7 stalked ; 8 diverging from 7 at middle of cell.

Type. H. eumeta, Druce.
Eumeta, Druce (Lophopteryx), Ann. and Mag. Nat. Hist. (7), v, p. 514 (1900).

## Odontosia.

Odontosia, Huibn., Verz. Bek. Schmett., 145 (1888).
Antennæ pectinated to tips. Palpi short. Primaries long ; outer margin crenulate, oblique ; long tuft on middle of inner margin ; vein 5 from middle of discocellular ; 6 from areole near cell; 7 and 8 from end of areole. Secondaries: veins 3 and 4 apart; 6 and 7 stalked ; 8 close to 7 to near end of cell. No thoracic crest.

Type. O. carmelita, Esp., from Europe.
Carmelita, Esp. (Bombyx), Schmett., iii, Cont., p. 65, t. 91, f. i. (1790).

Elegans, Strecker (Lophopteryx), Proc. Acad. Nat. Sci. Phil., 1884, p. 285 = Notaria, Hy. Edw. (Notodonta), Ent. Amer., i, p. 17 (1885).

## Hyperaschra.

IIyperaschrec, Butl., Ann. Mag. Nat. Hist. (5), vi, 65 (1880).

Male antennæ pectinate to tips. Palpi hairy. Primaries: outer margin smooth ; vein 5 from middle of discocellular ; 6 from upper angle of cell ; 7-10 stalked. Secondaries : 6 and 7 stalked; 8 close to 7 to near end of cell.

Type. II. pallida, Butl., from India.
Pallida, Butl., Ann. Mag. Nat. Hist. (5), vi, 1880, p. 65.

Stragula, Grote (Notodonta), Proc. Ent. Soc. Phil., iii, p. 93 $(1864)=$ Scitipennis, Walk. (Notodonta), Cat. Lep. Het., B. M. xxxii, p. 411 (1865).
Pacifica, Behr. (Notodonta), Proc. Cal. Acad. Sci. (2), iii, p. 206 (1892).

Tortuosa, Tepp. (Drynobia), Bull. Brook., Ent. Soc., iv, p. 2 (1881).
Georgica, H. S. (Notodonta), Ausser.-Europ.,Schmett., f. 384 (1855).

## Notodonta.

Notodonta, Ochs., Schmett., Eur., iii, 45 (1810).
Peridea, Steph., Ill. Brit. Ent. Haust., ii, 22 (1828).
Chatfieldia, Grote, Abh. Natur. Vereins zu Bremen, xiv, 7 (1895).

Male antennæ shortly pectinated, female simple. Areole absent. Primaries: vein 5 from middle of discocellular, 6-10 stalked. Secondaries : veins 3 and 4 apart ; 6 and 7 stalked ; 8 close to 7 to near end of cell.

Type. N. dromedarius, Linn., from Europe. Dromedarius, Linn. (Bombyx), Syst. Nat. i (2), p. 827 (1767). Basitriens, Walk., Cat. Lep. Het., B. M. v, p. 1000 (1855). Simplaria, Graef., Butl. Brook., Ent. Soc., iii, p. 95 (1881).

## Lophodonta.

Lophodonta, Pack., Proc. Ent. Soc. Phil., iii. p. 357 (18ف்4).
Antennæ simple in both sexes. Palpi short, hairy. Primaries: vein 5 from middle of discocellular; 6-10 stalked, areole absent. Secondaries : 6 and 7 stalked.

Type. L. ferruginea, Pack., l. c. (1864).
Angulosr. Sm. and Abb. (Phalæna), Lep. Ins. Georg., ii, pl. 83 (1797).

## Pheosia.

Pleosia, Hiibn., Verz. Bek. Schmett., 145 (1818).
Leiocampa, Steph., Ill. Brit. Ent. Haust., ii, 24 (1828).
Antennæ pectinated in both sexes. Palpi very short, hairy, not extending beyond frons. Primaries: vein 6 from upper angle of cell ; 7-10 stalked. Secondaries: veins 3 and 4 apart; 6 and 7 stalked ; 8 close to 7 to near end of cell.

Type. $P$. tremula, Clerck., from Europe. Tremula, Clerck. (Bombyx), Icones., t. 9, f. 13 (1759).
Dimidiata, H. S. (Drymonia), Ausser.-Europ., Schmett., f. 515 (1856) = Rimosa, Pack., Proc. Ent. Soc. Phil. iii, p. 355 (1864) = Californica, Stretch., Zyg. and Bomb., N. A., 116 (1872).
Portlandia, Hy. Edw., Ent. Amer., ii, p. 168 (1887)= Descherci, Neum. (Notodonta), Can. Ent., xxiv, p. 227 (1892).

## Goacampa, gen. nov.

Antennæ long, evenly and shortly pectinated in the of to the tips, serrate in the $q$. Head large and prominent. Palpi very short, porrect. Wings long and narrow. Abdomen short and stout. Primaries with long areole from before end of cell ; 6 from areole ; 7 and 10 from end of areole ; 3 and 4 from lower angle of cell. Secondaries with 6 and 7 stalked ; 8 very close to 7 to near the end of the cell.

Type. G. variabilis, Schs.
Variabilis, Schs., sp. nov., t. xii, f. 6.

## Goacampa variabilis, sp. nov.

t 0 . Head and thorax grey. Abdomen brownish above, grey below, white towards the base. Primaries light grey ; an inner, and outer fine angular darker line ; a subterminal, and a terminal row of dark streaks between the veins; a large black spot at the end of the cell ; a broad black basal band. A third of has merely a broad black streak from the base to the outer margin above the submedian vein. The $q f$ mostly darker grey with the lines and streaks as in the む, and the discal spot circular, dark grey, filled in with lighter grey. One $O$ has the inner margin broadly black and a large black space beyond the cell. Secondaries in both sexes white; the veins brownish at the base, black marginally; a terminal black shade and a black spot just before the angle ; fringe white.
Expanse 42-46 m.m.
Hab. Oaxaca, Mexico.
Kurtia, gen. nov.
Palpi hairy, third joint minute. Antennæ deeply pectinated for four-fifths. Tibia hairy. Primaries long and narrow ; the costal margin slightly convex, apex rounded, outer margin very oblique, inner margin straight ; veins 3 and 4 apart ; 5 from upper angle of cell ; areole long; vein 6 from beyond its middle; 7 and 8 from end
of areole, 10 from before end. Secondaries short and broad, costal margin convex, outer margin rounded ; veins 3 and 4 from a point ; 6 and 7 on short stalk ; vein 5 absent.

Type. Kurtia modesta, Schs.<br>Modesta, Schs., sp. nov., t. xii, f. 7.

> Kurtia modesta, sp. nov.

Palpi dark brown ; head and collar dark grey ; thorax reddishbrown ; abdomen duller brown with long dorsal tufts. Primaries reddish-brown with some slight greyish intervenal streaks ; traces of basal and inner lines on costa only ; an outer row of minute dark spots almost imperceptible and a terminal row of black spots between the veins. Secondaries dull brown; the fringe partly fawn-colour.

Expanse 50 m.m.

Hab. Aroa, Venezuela.

> Anita, gen. nov.

Antennæ pectinated for four-fifths of length. Palpi ascending, third joint minute. Legs smooth. Primaries short and broad; costal and inner margin straight ; outer margin obliquely rounded; veins 3 and 4 apart ; 5 from close to upper angle ; areole long and narrow ; 6 from beyond its centre ; 7 and 8 from end of areole; 10 from just before end. Secondaries short and broad ; costal margin straight, apex rounded, outer margin straight to vein 2 then rounded ; vein 5 very weak.

Type. Anita basipuncta, Schs. Basipuncta, Schs., sp. nov., t. xii, f. 8 .

## Anita basipuneta, sp. nov.

Palpi creamy in front. Head and thorax brown ; white tufts at base of antennæ. Abdomen light brown. Primaries above median vein whitish, below it light brown ; outer portion of veins from submedian to vein 6 dark brown; a large velvety-brown spot at base of costa and cell. Secondaries white thickly speckled with light brown.

Expanse 42 m.m.
Hab. Aroa, Venezuela,

## Colax.

Colax, Hübn., Verz. Schmett., 141, 1513 (1816).
Antennæ pectinated in both sexes on basal two-thirds. Palpi hairy, hardly extending beyond frons. Head tufted at base of antennæ. Primaries : costal 'margin convex on outer half; apex acute ; outer margin straight from apex to vein 5 , then oblique, slightly concave in $\delta$ to inner angle ; areole absent; vein 5 from middle of discocellular ; 6-10 stalked, 10 from before 7. Secondaries : veins 3 and 4 apart; 6 and 7 stalked; 5 absent; 8 diverging from 7 at middle of cell.

Type. C. apulus, Cr. Apulus, Cr. (Sphinx), Pap. Exot., i, t. 88, f. E. (1779). Phocus, Schs. (Hapigia), P. Z. S., 1892, p. 340.

## Hemiceras.

Hemiceras, Guen., sp. gen., Lep. Noct., ii, p. 379 (1852).
Ecregma, Walk., Cat. Lep. Het., B. M. xii, p. 966 (1857).
Comidava, Walk., l. c., xxvi, p. 1695 (1862).
Epicoria, Walk., l. c., xxxiii, p. 852 (1865).
Gadiana, Walk., l. c., p. 854 (1865).
Salamboria, Walk., l. c., p. 855 (1865).
Eulophopteryx, Möschl., Verh. Zool.-bot. Ges. Wein, xxvii, p. 684 (1878).

Antennæ pectinated for half their length in male ; simple or fasciculate in female. Palpi extending beyond frons, smooth ; second joint long; third joint short. Primaries: vein 5 from near upper angle of cell ; 6 from middle of areole ; 7, 8, 10 from end of areole. Secondaries: vein 5 absent; 6 and 7 stalked; 8 diverging from 7 at middle of cell. Male usually with glandular spot at end of vein 2.

## Type. H. pallidula, Guen.

Pallidula, Guen., l. c., p. 381 (1852).
Linea, Guen., l. c., p. 381 (1852).
Trinubila, Guen., l. c., p. 382 (1852).
Lotula, Guen., l. c. (1852).
Pulverula, Guen., l. c. (1852).
Indistans, Guen., l. c., p. 383 (185゙2).
Cadmia, Guen., l. c. $(1852)=$ obliquilinea, Walk. (Comidava), l. c., xxvi, p. 1695 (1862).
Barina, Guen., l. c., p. 383 (1852) = Illucens, Walk, l. c., xxxiii, p. 852 (1865).
Sigula, Guen., l. c., p. 384 (1852).

Violascens, Gnen., l. c. (1852).
Vinicosta, Guen., l. c. (1852).
Sabis, Guen., l. c., p. 385 (1852)=Ania, Druce, P. Z. S., 1890, p. 511.
Meona, Cr., Pap. Exot., iv, t. 358, f. B ; larva: Stoll., t. 33, f. 7.

Lissa, Druce, l. c. (1890).
Losa, Druce, l. c. (1890).
Levana, Druce, l. c., p. 512 (1890).
Plusiata, Feld., Reise Nov., t. 97, f. 11 (1874).
Transducta, Walk. (Ecregma), l. c., xii, p. 967 (1857).
Sparsipennis, Walk., l. c., p. 972 (1857) = Canosparsa, Walk. (Epicoria), l. c., xxxiii, p. 853 (1865).
Metastigma, Walk., l. c., xii, p. 974 (1857).
Leucospila, Walk., l. c. (1857).
Deornata, Walk. (Epicoria), l. c., xxxiii, p. 853 (1865).
Gemina, Walk. (Epicoria), l. c. (1865).
Walkeri, Schs., Nom. Nov. = Deornata (preoccupied), Walk. (Salamboria), l. c., p. 855 (1865).
Rufescens, Walk. (Gadiana), l. c., p. 85ั4 (1865).
Alba, Walk. l. c., xxxiii, p. 851 (1865).
Obliquicola, Walk. (Comidava), l. c., xxvi, p. 1696 (1862).
Subochraceum, Walk., Char. Lep. Het., p. 184 (1866) = Mora, Druce, Biol. Centr. Amer. Lep. Het., i, p. 251 (1887).

Plana, Butl., Trans. Ent. Soc. Lond., 1879, p. 34.
Striolata, Butl., l. c. (1879).
Modesta, Butl. (Ecregma), l. c. (1879).
Splendens, Möschl. (Eulophopteryx), l. c., p. 684 (1878).
Albulana, Druce (Comidava), l. c., i, p. 252 (1887).
Ruizi, Dogn., Le Naturaliste, 1889, p. 25 ; Lep. de Loja, t. 6, f. 1 .

Punctata, Dogn., l. c., t. 6, f. 2.
Carmelita, Mssn. Stiib. Reis. Sud. Am., p. 148, t. 7, f. 4 (1890).

Postica, Mssn., l. c., t. vii, f. 3 (1890).
Tulola, Schs., sp. nov.
Striata, Schs., sp. nov.
Vecina, Schs., sp. nov.
Aroensis, Schs., sp. nov.
Serana, Schs., sp. nov.
Brunnea, Schs., sp. nov.
Nigrigutta, Schs., sp. nov.
Ovalis, Schs., sp. nov.

Bilinea, Schs., sp. nov. Pagana, Schs., sp. nov. Nubilata, Schs., sp. nov. Punctilla, Schs., sp. nov. Quebra, Schs., sp. nov. Velva, Schs. sp. nov. Nigricosta, Schs., sp. nov., t. xii, f. 10. Nigrescens, Schs., sp. nov., t. xii, f. 9. Sericita, Schs., sp. nov.

## Hemiceras tulola, sp. nov.

Head with whitish tufts. Thorax and abdomen brownish-grey. Primaries brownish-grey ; lines fine, black; the inner line wavy, outwardly oblique from costa to inner margin ; outer line linear on inner margin, otherwise punctiform, straight from costa near apex to inner margin at a third from angle; an indistinct dark shade in cell. Secondaries light brown, whitish towards the base. Inner margin of primaries slightly sinuous.

Expanse $37 \mathrm{~m} . \mathrm{m}$.
Hab. Castro, Parana.
Allied to $H$. lotula, Gn.
Hemiceras striata, sp. nov.
t. Head and thorax greyish-brown ; collar and abdomen dorsally reddish-brown ; abdomen and thorax below greyish. Primaries greyish-brown speckled with olivaceous scales ; the veins dark olivebrown, interrupted by the transverse lines; the inner line slightly oblique ; the outer line from the costal margin near the apex to middle of inner margin ; both lines reddish-brown inwardly shaded with olive and outwardly with testaceous; the inner margin is nearly straight and slightly excised at the base ; fringe olive-brown. Secondaries white, the veins and outer margin reddish-brown, the fringe white ; no opaque spot.

Expanse $42 \mathrm{~m} . \mathrm{m}$.

## Hab. Nova Friburgo, Brazil.

## Hemiceras vecina, sp. nov.

Body reddish-grey above, testaceous below. Primaries light reddishbrown thickly mottled with white scales; the two lines are fine, dark reddish-brown, outwardly shaded with ochreous and white; the inner line nearly straight; the outer line from close to apex on
costal margin to middle of inner margin ; a subterminal darker shading ; fringe dark brown ; a darker oblique line at the end of the cell. The inner margin is slightly toothed near the base. Secondaries light brown, the opaque spot of the same colour ; the fringe whitish.

Expanse 35-42 m.m.

Hab. Aroa, Venezuela; Jalapa, Orizaba, Mexico.

Allied to H. cadmia, Gn.
Hemiceras aroensis, sp. nov.
Frontal tuft white, palpi and thorax reddish fawn-colour, some lilacine scales on tegulæ. Abdomen above fawn-colour, underneath yellowish. Primaries toothed at middle of imer margin and at inner angle, fawn-colour tinged with lilacine from base to outer line ; the inner line wavy, very fine and indistinct; the outer line from apex to sinus on inner margin, dark brown shading to lighter brown outwardly, and marked by dark streaks on the veins ; a minute dark point on subcostal above the cell ; fringe not darker than the outer margin. Secondaries white, the veins and outer margin narrowly, and opaque spot, light reddish-brown ; fringe white.

Expanse $35 \mathrm{~m} . \mathrm{m}$
Hab. Aroa, Venezuela.
Hemiceras serana, sp. nov.
Body fawn-colour above, creamy-yellow below. Primaries with a single tooth near the base, pale fawn-colour ; the inner line fine, hardly perceptible, marked by three black points on veins ; the outer line from costa near apex to middle of inner margin, fine reddish-brown, outwardly shaded with yellowish and marked by minute black points on the veins ; a dark point in the cell ; fringe reddish-brown. Secondaries white ; veins, outer margin narrowly, and opaque spot light reddish-brown ; fringe white.

Expanse $35 \mathrm{~m} . \mathrm{m}$.
Hab. Aroa, Venezuela.

## Hemiceras brunnea, sp. nov.

Body light violaceous-brown ; top of the head white. Primaries with the inner margin slightly sinuate, excised at the base, brown faintly speckled with greyish scales; an inner and an outer row of black points on the veins connected by an indistinct rufous shade;
the inner row oblique to median vein, then straight to inner margin ; the outer row from costa near apex parallel to outer margin to vein 3, then curved inwardly to inner margin ; an oblique dark shade in the cell. Secondaries light brown, whitish at the base and darker along the outer margin ; fringe testaceous. No opaque spot.
Expanse of $45 \mathrm{~m} . \mathrm{m}$.

## Hab. Cochabamba, Bolivia.

## Hemiceras nigrigutta, sp. nov.

Top of head white, otherwise and also thorax reddish-brown. Abdomen above dark violaceous-brown, underneath creamy yellow. Primaries with the inner margin straight, slightly excised at base, dull brown ; the inner line slightly curved from costa to inner margin, fine yellowish, outwardly spotted with black points on the veins; the outer line similar, with the black points placed inwardly, from the costa at four-fifth from the base, slightly curved and parallel to the outer margin ; a black spot in the cell, inwardly surmounted by a smailer black spot. Secondaries whitish-fawn colour, with the outer margin darker; the opaque spot large and dark.

Expanse 46 m.m.

## Hab. Cochabamba, Belivia.

## Hemiceras ovalis, sp. nov.

Head and thorax pale grey; abdomen above light brown, underneath white. Primaries with the inner margin slightly rounded, silvery-grey, slightly speckled with darker scales; a basal, inner, and outer fine transverse lunular lines, light brownish marked by a darker speck on the veins ; a large oval yellowish spot in the cell, crossed by the inner line. The outer margin broadly darker grey. Secondaries white with the veins and outer margin brownish; tip of the fringe whitish. Underneath the wings are white; the costal half of the primaries reddish-brown. The opaque spot dark brown or light grey.

Expanse $44 \mathrm{~m} . \mathrm{m}$.
Mab. Nova Friburgo, Brazil.

## Hemiceras lilinea, sp. nov.

Body violaceous-brown above, yellowish lelow. Primaries red-dish-brown, the veins powdered with greyish scales; the inner line straight ; the outer line from close to apex to middle of inner margin;
trans. ent. soc. Lond. 1901 .-PART III. (SEPT.) 23
both lines dark olivaceous-brown, the inner line inwardly, the outer line outwardly shaded with ochreous ; some indistinct subterminal shadings ; two blackish spots in the cell, sometimes confluent. The inner margin is slightly toothed near the base. Secondaries brown.

Expanse 40 m.m.

## Hab. Jalapa, Mexico.

## Hemiceras pagana, sp. nov.

Head and thorax greyish. Abdomen reddish-brown above, testaceous below. Primaries rather long and narrow ; the outer margin very obliquely rounded; inner margin sinuous. Primaries fawncolour, finely speckled with dark grey, especially in the median space; a large black spot at the end of cell ; the lines indistinct; the inner line wavy oblique ; the outer line irregular punctiform, followed by some dark shades at apex. Secondaries white, the veins and outer margin narrowly reddish-brown ; the glandular patch prominent.

Expanse $45 \mathrm{~m} . \mathrm{m}$.

## Hab. Paraguay.

## Hemiceras nubilata, sp. nov.

Head and thorax light reddish-brown. Abdomen testaceous. Primaries reddish-brown, the median space darker, being thickly speckled with grey and lilacine scales ; the inner line faint, dark grey, oblique from costa to median vein, then slightly wavy to inner margin ; the outer line punctiform, inwardly oblique from costa to vein 3 , then slightly wavy to inner margin and nearer the base ; a reddish shade on outer portion of line on inner margin, a dark shade on outer margin betweeu veins 2 and 4 ; a dark spot in cell. Secondaries light reddish-brown palest at the base.
Expanse $\% 44 \mathrm{~m} . \mathrm{m}$.
Hab. Aroa, Venezuela.
Allied to H. metastigma, Walk., but altogether darker and the inner margin of primaries straighter; described from 7 ㅇ ㅇ 9 우우.

Hemiceras punctilla, sp. nov.
d. Head with a white spot between antennæ ; the base of antennæ white ; the collar and thorax light reddish-brown, the former edged with dark scales. Primaries with inner margin excised before angle,
light reddish-brown ; some black scales at the base ; the inner line black, wavy, broken; the outer line wavy, black, parallel to outer margin and most heavily marked on costa and inner margin ; a dark reddish-brown spot in cell, preceded on subcostal vein by a small black spot. Secondaries white the veins darker, and some reddishbrown scales on outer margin ; the glandular patch small reddishbrown.

Expanse $40 \mathrm{~m} . \mathrm{m}$.
Hub. Aroa, Venezuela.

## Hemiceras quebra, sp. nov.

Inner margin of primaries sinuous. Body reddish-brown ; abdomen below testaceous. Primaries reddish-brown ; the lines faint, punctiform, black; the outer line from vein 2 to inner margin further from outer margin than the rest of line. A faint dark spot in cell. Secondaries reddish-brown, whitish at the base and in dise.
Expanse 42 m.m.
Hab. Aroa, Venezuela.
Described from two $\widehat{\delta} \boldsymbol{\delta}$.
Hemiceras velva, sp. nov.
Abdomen testaceous ; head, thorax and primaries pale violaceousbrown; the lines faintly traced and punctiform; the outer line parallel to outer margin from costa to submedian vein, followed by a faintly darker shade between veins 3 and 4 ; an indistinct dark spot in cell. Secondaries very white, the tips of veins and outer margin narrowly reddish-brown. The inner margin of primaries straight.
Expanse $39 \mathrm{~m} . \mathrm{m}$.
Hab. Aroa, Venezuela.
Described from three $\widehat{\}}\}$, one $f$.
Hemiceras nigricosta, sp. nov.
Head reddish-brown, posteriorly white. Thorax reddish-brown. Abdomen dark brown above, pale brown below. Primaries reddishbrown, the space between the lines somewhat violaceous; the costa black speckled with white; the inner line dark, curved from costa to inner margin ; the outer line consisting of dark lunular shades ; a dark oblique line at the end of the cell, and a darker shade beyond
the outer line between veins 3 and 4 ; the inner margin deeply excised before angle. Secondaries dull brown.

Expanse $\ddagger 53 \mathrm{~m} . \mathrm{m}$.

## Hab. Costa Rica.

## Hemiceras nigrescens, sp. nov.

Head and collar anteriorly reddish-brown ; white tufts at base of antennæ and on head posteriorly. Thorax and abdomen above violaceous-brown, underneath testaceous. Primaries violaceousblack, the base somewhat reddish ; the outer margin brown ; a dark shade from the cell crossing the outer line to the brown outer margin; the lines dark reddish-brown ; the inner line oblique from costa to median vein, then wavy to inner margin ; the outer line, straight, lunular followed at apex by some whitish scales; inner margin deeply excised before angle. Secondaries very dark brown above, testaceous below.
Expanse of $39 \mathrm{~m} . \mathrm{m}$. ; ㅇ $45 \mathrm{~m} . \mathrm{m}$.

## Hab. Costa Rica.

## Hemiceras sericita.

Head and thorax violaceous-brown. Collar reddish brown. Some white hairs at base of antennæ and on vertex. Abdomen dull brown. Primaries silky violaceous-brown ; basal third of costa and an inner shade from costa, narrowing to a point on submedian vein, reddishbrown ; a reddish-brown oblique streak at end of cell ; the outer margin broadly reddish-brown, limited by a dark brown line from costa, near apex, where it is preceded by some white scales, straight to vein 2, then curved inwardly to excision on inner margin ; a deep lobe on inner margin between base and excision. Secondaries light brown, palest at the base.

Expanse 44 m.m.

## Hab. Colombia.

## Hemiccras pallidulu, Guen. Larva.

Length $1-1 \frac{1}{8}$ inches. Head large and prominent, yellow except lower third which is black. First segment smaller than the others, yellow with a conspicuous black transverse band. Body rich maroon with two dorsal yellow bands which terminate on segment 11 in a large subdorsal bright red tubercle ; laterally are three white lines, on the lowest of which are the black stigme ; these lines continue to segment 12 ; the posterior portion of segment 11 , the 12th dorsally
and anterior portion of 13 th, white ; lower portion of segment 13 black; prolegs black; underneath and abdominal legs reddish; anal feet black. August 20th formed a thin cocoon in leaves drawn together ; emerged September 11th. Pupa $\frac{3}{4}$ of an inch in length, rather elongated, smooth, dull reddish-brown.

## Hapigia.

> Hapigia, Guen., Noct., ii, p. 375 (1852).
> Corymlia, Walk., Cat. Lep. Het., B. M. xxxiii, p. 765 (1865).

Antennæ ciliate. Palpi extending beyond frons, the second joint hairy. Primaries : apex acute; outer margin rounded, very oblique vein 5 from middle of discocellular ; 6-10 stalked ; 3 and 4 close together. Secondaries: veins 3 and 4 form a point; 6 and 7 stalked; 8 connected with 7 by a bar towards base of cell. In H. obliqua, Walk., vein 5 on primaries is from above middle of discoccllular.

Type. H. nodicornis, Guen.
Nodicornis, Guen., l. c., 376 (1852).
Obliqua, Walk. (Corymbia), Cat. Lep. Het., B. M. xxxiii, p. 766 (1865), erroneously described from India. Smerinthoides, Walk. (Corymbia), l. c., p. 765 (1865). Simplex, Walk. (Corymbia), l. c., p. 766 (1865).
Raatzi, Möschl. (Chliara), Verh. Zool.-bot. Ges. Wien., xxxii, p. 350 (1883) = Ribbei, Druce (Hapigia), Biol. Centr. Amer. Lep. Het., i, p. 244, t. xxv, f. 8 (1887). Accipiter, Schs., P. Z. S., 1892, p. 340.
Abscondens, Walk. (Crino), l. c., xiv, p. 1347 (1858), nec fig. Biologia.
Rufesceris, Schs., sp. nov.

## Hapigia rufescens.

Head and thorax reddish-brown. Abdomen greyish-brown. Primaries reddish-brown ; an indistinct greyish basal line ; the inner line represented by greyish spots on veins; the outer line dark reddish-brown, slightly curved ; subterminal blackish spots in pairs between the veins, one above the other, those at apex shaded with white and coalescent ; these spots preceded by a dark brown wavy shade; a silvery white crescent in cell, surmounted by a
round silver spot. Secondaries: buff on costal margin ; light blackish-brown outwardly.

Expanse 48 m.m.
Hab. Aroa, Venezuela.

## Chliara.

Chliara, Walk., Cat. Lep. Het., B. M. xii, p. 938 (1857).
Autographa, Hübn., Verz. Bek. Schmett., p. 251 (partim).
Antennæ ciliate, not nodose at base. Palpi upturned ; second joint hairy ; third joint short, smooth, conical. Primaries: apex acute ; outer margin rounded, oblique. Vein 5 from middle of liscocellular ; 6 from upper angle or just beyond it ; 7-10 stalked. Secondaries ; veins 3 and 4 from a point ; 6 and 7 on short stalk.

Type. C. croesus, Cr.
Croesus, Cr. (Phalæna), Pap. Exot., ii, t. 142, f. c. $(1780)=$ Creesa, Hübn. (Autographa), l. c., p. $251=$ Imperialis, Walk., l. c., p. 939 (18.57).
Moneta, Feld., Reise Nov., t. xcvi, f. 7 (1874).
Notha, Möschl., Verh. Zool.-bot. Ges. Wien, xxxii, p. 350, t. 18, f. 38 (1883).

Antwa.
Antra, Huibn., Verz. Bek. Schmett., p. 266 (1816).
Caroia, Walk., Cat. Lep. Het., B. M. xv, p. 1791 and 1861 (1858).

Antennæ fasciculate. Palpi upturned; second joint, hairy, elliptical ; third joint long, smonth. Primaries: apex acute ; outer margin rounded, oblique, partly crenulate ; vein 5 from just above middle of discocellular ; 6 from upper angle of cell; 7-10 stalked. Secondaries : veins 3 and 4 from a point; 6 and 7 stalked; 8 diverging from 7 at middle of cell.

Type. Antra juturna, Cr.
Juturna, Cr., Pap. Exot., ii, t. 129, f. E. (1780).
Licormas, Cr., l. c., i, t. 74, f. E. (1779)=Bombycoides (Caroia), Walk., l. c., p. 1792 (1858).

## Pseudhapigia, gen. nov.

Antennæ pectinated to tips. Palpi not extending beyond frons ; second joint hairy ; third minute. Primaries : apex acute ; outer margin rounded, oblique; inner angle rounded; inner margin excised; vein 5 from middle of discocellular; $6-10$ stalked.

Secondaries: veins 3 and 4 slightly apart; 6 and 7 stalked; 8 diverging from 7 at middle of cell.

Type. P. brunnea, Schs.
Brunnea, Schs., sp. nov.
Xolotl, Schs. (Hapigia), P. Z. S., 1892, p. 339 ; Biol. Centr. Amer. Lep. Het., ii, t. xci, f. 19.

## Pserdhapigia brunnea, sp. nov.

${ }^{t}$. Antennæ pectinated to tips. Head and thorax reddish-brown; abdomen lighter brown. Primaries reddish-brown, the costa greyish; a basal and an inner transverse greyish line, the latter outwardly oblique from costa; the outer line parallel to outer margin from costa to vein 2 , then straight to inner margin, dark grey, inwardly shaded with violaceous ; a subterminal wavy black line preceded at apex by two silver spots; in the cell a snall, followed by a larger irregular silvery spot finely edged with black. Secondaries grevish, palest at the base. The inner margin of primaries is slightly excised at its middle.
Expanse 44 m.m.
Hab. Guadalajara, Mexico.

## Canodia.

Canodia, Guen., Sp. Gen. Noct., ii, p. 377 (1852).
Antennæ pectinated to tips. Palpi short not extending beyond frons. Primaries acute; outer margin rounded, oblique; inner angle rounded ; inner margin straight.

Type of Genus. C. carmelitoides, Guen.
Carmelitoides, Guen., l. c., p. 378 (1852), pl. 12, f. 8. Difformis, H. S. (Canodea), Ausser.-Europ. Schmett, f. 132.

These species are both unknown to me, and Difformis may possibly not be congeneric with Carmelitoides.

## Explanation of Plate XI.

Fig. 1. Tagela dentata, Schs.
2. Marthula quadrata, Walk.
3. Antiopha multilinea, Schs.
4. T'ecmessa elegans, Schs.
5. Psorocampa denticulata, Schs.
6. Betola aroata, Schs.
7. Gopha mixtipennis, Walk.
8. Naduna lignea, Schs.
9. Pauluma nubila, Schs.
10. Hardingia roberti, Schs.
11. Salluca moruma, Schs.
12. Litodonta nigripuncta, Schs.
13. Goaxis singularis, Schs.

## Explanation of Plate XIt.

Fig. 1. Afilia cinerea, Schs.
2. Nagidusa xylocampoides, Walk.
3. Notela jaliscana, Schs.
4. Euharpyia comita, Schs.
5. Eunotela pallida, Schs.
6. Goacampa variabilis, Schs.
7. Kurtia modesta, Schs.
8. Anita basipuncta, Schs.
9. Hemiceras nigrescens, Schs.
10. ", nigricosta, Schs.


6.


